

# UNITED STATES SPECIAL OPERATIONS COMMAND



## FISCAL YEAR 1998-1999 BUDGET ESTIMATES

RDT&E, DEFENSEWIDE

PROCUREMENT, DEFENSEWIDE

19970226 102

FEBRUARY 1997

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## RDT&E DOCUMENTATION FOR FY 1998 - FY 1999 BUDGET ESTIMATES

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UNITED STATES SPECIAL OPERATIONS COMMAND  
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSEWIDEOVERVIEW

The United States Special Operations Command (USSOCOM) is a unified command with worldwide responsibilities to train, equip and maintain Special Operations Forces (SOF) in a ready state in support of the contingency plans developed by the five regionally oriented unified commands (USEUCOM, USCENCOM, USPACOM, USACOM, and USSOUTHCOM). When directed by the President, USCINCSOC will assume command of a special operation anywhere in the world. USSOCOM's Army component forces include special forces (Green Berets), Rangers, short to medium range infiltration/exfiltration aircraft, civil affairs specialists, and psychological operations specialists. Navy component forces consist of Sea, Air, & Land (SEAL) Teams and special boat units. The Air Force component forces consist of special operation units which provide medium to long range air infiltration/exfiltration aircraft, specially equipped gunships, and aerial refueling capability. USSOCOM is the only operational command directly responsible for determining its own force structure requirement, determining the related materiel requirements, procuring the SOF unique equipment, training, and deploying its own units.



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## SPECIAL OPERATIONS COMMAND RDT&amp;E PROGRAM

Appropriation: 0400 D Research Development Test & Evaluation DefensewideTOA, \$ in Millions

<u>R-1 Line Item #</u>	<u>Program Element #</u>	<u>Item</u>	<u>Budget Activity</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
149	1160279BB	Small Business Innovative Research (U)	7	2.239	3.017		
150	1160401BB	Special Operations Technology Development (U)	7	3.774	5.865	4.161	4.247
151	1160402BB	Special Operations Advanced Technology Development (U)	7	14.515	7.602	8.009	8.171
152	1160404BB	Special Operations Tactical Systems Development (U)	7	105.201	93.855	73.073	86.216
153	1160405BB	Special Operations Intelligence Systems Development (U)	7	2.880	1.946	4.914	1.839
154	1160407BB	SOF Medical Technology Development (U)	7	1.747	1.803	2.029	2.077
155	1160408BB	SOF Operational Enhancements (U)	7	16.646	28.177	26.357	13.790
		Total Operational Systems Development:		147.002	142.265	118.543	116.340
		Total Special Operations Command:		147.002	142.265	118.543	116.340

## PROJECT LISTING (\$K All Items in Budget Activity 7)

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Program Element / Project	Submit	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
<u>PE1160279BB Small Business Innovative Research</u>									
S050 Small Business Innovative Research	97APB 98PB	2,239	3,017						
<u>PE1160401BB Special Operations Technology Development</u>									
S100 Special Operations Technology Development	97APB 98PB	3,969 3,774	4,083 5,865	4,173 4,161	4,267 4,247	4,361 5,329	4,457 5,419	4,523	5,180
<u>PE1160402BB Special Operations Advanced Technology Development</u>									
P204 Explosive Ordnance Disposal - Low Intensity Conflict	97APB 98PB	4,137 4,057							
P205 Special Operations/Low Intensity Conflict Studies	97APB 98PB	993 974							
S200 Special Operations Special Technology	97APB 98PB	9,985 9,484	7,927 7,602	8,105 8,009	8,287 8,171	8,469 8,328	8,637 8,514	8,701	9,455
PE Subtotals:	97APB 98PB	15,115 14,515	7,927 7,602	8,105 8,009	8,287 8,171	8,469 8,328	8,637 8,514	8,701	9,455
<u>PE1160404BB Special Operations Tactical Sys. Dev.</u>									
D476 PSYOP Advanced Development	97APB 98PB	492 1,100	484 660	1,436 1,199	14,251 14,477	769 1,988	1,112	2,645	319
D615 SOF Aviation	97APB 98PB	3,426 3,552	1,163 2,145	1,340 5,942	28,419 7,220	12,063 6,661	935 11,827	8,856	8,268
SF100 Aviation Systems Advanced Development	97APB 98PB	6,488 5,680	4,006 1,570	5,746 2,396	11,660 16,588	16,866 19,334	29,921 15,114	11,373	15,564

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97APB- FY 1997 Amended President's Budget  
 98PB- FY 1998-1999 Budget Estimates

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## PROJECT LISTING (\$K All Items in Budget Activity 7)

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<u>Program Element / Project</u>	<u>Submit</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
SF200 CV-22 SOF Osprey	97APB 98PB					10,017	10,428	10,151	11,436
S0417 Underwater Systems Advanced Development	97APB 98PB	30,863 29,861	18,993 21,796	11,921 24,229	4,473 2,318	4,479 5,227	4,765 12,446	10,323	5,752
S1684 SOF Surface Craft Advanced Development	97APB 98PB	9,189 8,419	2,960 6,783	3,541	2,488	5,948	678 2,980	5,958	4,972
3284 SOF Aircraft Defensive Systems	97APB 98PB	12,109 10,744	6,567 6,413	7,879 8,155	3,990 5,464	13,274 20,115	11,048 17,434	11,383	10,015
3326 AC-130U	97APB 98PB	6,124 4,282	14,563 14,495	6,327 6,009	1,668 1,164	1,395 1,386	1,384 1,375	755	759
3642 Aircrew Training System	97APB 98PB	18,034 18,831	4,339 4,262	243	238				
S350 Special Operations Forces Planning and Rehearsal System	97APB 98PB	9,456 7,997	7,439 7,339	5,656 5,640	4,092 4,072	3,824 3,801	3,559 3,535	3,275	3,024
S375 Weapons and Support Systems Advanced Development	97APB 98PB	150 147	1,986 3,801	2,204 4,109	1,760 2,548	3,453 4,100	2,543 2,525	463	276
S600 Future SOF Aircraft	97APB 98PB			446	12,050	20,273	46,311		
S625 SOF Training Systems	97APB 98PB	2,437 4,441	9,759 9,759	11,985 9,564	8,103 24,777	9,333 11,359	1,871 12,907	29,197	1,933

97APB- FY 1997 Amended President's Budget  
98PB- FY 1998-1999 Budget Estimates

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## PROJECT LISTING (\$K All Items in Budget Activity 7)

<u>Program Element / Project</u>	<u>Submit</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>
S700 Communications Advanced Development	97APB	1,457	2,648	2,064	3,421	2,487	4,113		
	98PB	730	2,604	2,130	2,890	2,601	2,212	2,077	2,205
S800 Munitions Advanced Development	97APB	7,639	9,016	3,212	2,740	9,775	11,918		
	98PB	9,357	12,208	3,700	4,698	6,432	15,233	15,482	18,563
S900 Miscellaneous Equipment Advanced Development	97APB	60							
	98PB	60	20						
PE Subtotal:									
PE1160403BB Special Operations Intelligence Systems Development	97APB	107,924	83,923	64,000	99,353	103,939	119,046	-	-
S400 SOF Intelligence	98PB	105,201	93,855	73,073	86,216	93,021	109,128	111,938	83,086
PE1160407BB SOF Medical Technology Development	97APB	2,843	1,315	4,996	2,446	2,626	3,392		
S275 SOF Medical Technology R&D	98PB	2,880	1,946	4,914	1,839	2,077	3,862	1,432	1,466
PE1160408BB SOF Operational Enhancements	97APB	1,814	1,887	2,035	2,087	2,139	2,192		
S500A Operational Enhancements	98PB	1,747	1,803	2,029	2,077	2,126	2,177	2,224	2,277
PE1160409BB SOF Operational Enhancements	97APB	16,156	23,216	18,584	22,031	22,151	22,848		
S500A Operational Enhancements	98PB	16,646	28,177	26,357	13,790	14,554	40,992	12,816	12,747
RDT&E APPROPRIATION TOTALS:	97APB	147,821	122,351	101,893	138,471	143,685	160,592	-	-
	98PB	147,002	142,265	118,543	116,340	125,435	170,092	141,634	114,211

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97APB- FY 1997 Amended President's Budget  
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UNITED STATES SPECIAL OPERATIONS COMMAND  
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSEWIDEOVERVIEW

The United States Special Operations Command (USSOCOM) is a unified command with worldwide responsibilities to train, equip and maintain Special Operations Forces (SOF) in a ready state in support of the contingency plans developed by the five regionally oriented unified commands (USEUCOM, USCENCOM, USPACOM, USACOM, and USSOUTHCOM). When directed by the President, USCINCSOC will assume command of a special operation anywhere in the world. USSOCOM's Army component forces include special forces (Green Berets), Rangers, short to medium range infiltration/exfiltration aircraft, civil affairs specialists, and psychological operations specialists. Navy component forces consist of Sea, Air, & Land (SEAL) Teams and special boat units. The Air Force component forces consist of special operation units which provide medium to long range air infiltration/exfiltration aircraft, specially equipped gunships, and aerial refueling capability. USSOCOM is the only operational command directly responsible for determining its own force structure requirement, determining the related materiel requirements, procuring the SOF unique equipment, training, and deploying its own units.

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UNITED STATES SPECIAL OPERATIONS COMMAND  
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSEWIDE

PROGRAM ELEMENT COMPARISON SUMMARY

INTRODUCTION AND EXPLANATION OF CONTENTS

1. General. This document has been prepared to provide summary information on the United States Special Operations Command Research, Development, Test and Evaluation Program to Congressional committees during the FY 1998-1999 President's Budget hearings. RDT&E documentation includes:

- Exhibit R-1, Special Operations Command RDT&E Program.
- Project Listing by Program Element (PE).
- Exhibit R-2, RDT&E Budget Item Justification Sheet. These exhibits have been prepared under the following guidelines: R-2, paragraph A, is submitted for RDT&E PEs; R-2, paragraphs A through F, are submitted for each PE project resourced in the budget years. Acquisition strategies are provided for non-technology projects that have a one-to-one relationship with an acquisition program and for sub-projects funded at \$1.0 million or more in the budget year.
- Exhibit R-3, RDT&E Program Element / Project Cost Breakdown. An R-3 is provided for each advanced development project.

2. Comparison of FY 1996 and FY 1997 Data. A direct comparison of FY 1996 and FY 1997 data in the R-1 exhibit dated March 1996 will reveal only minor differences. PE 1160279BB, Project S050, "Small Business Innovative Research," is resourced by taxing other programs in the execution year. USSOCOM does not program, nor budget, for this PE.

3. Relationship of FY 1998/1999 Budget Structure to the FY 1997 President's Budget Submitted to Congress. There are no project-level new starts since submission of the March 1996 President's Budget. One project, S600, "SOF Future Aircraft," budgeted in the FY 1997 Amended

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UNITED STATES SPECIAL OPERATIONS COMMAND  
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSEWIDE

President's Budget to begin in FY 1998, was terminated. Its resources were realigned to project SF200, "CV-22 SOF Osprey," and other high priority MFP-11 efforts. Project 3642, "Aircrew Training System," in PE 1160404BB will be completed in FY 1997.

4. Classification. This supplement is unclassified.

5. Classified Programs. Information on classified programs, PE 1160408BB (SOF Operational Enhancements), is provided under separate cover.





RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE		PE 1160279BB Small Business Innovative Research							
COST (in millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160279BB (Small Business Innovative Research		2.239	3.017							Cont.	Cont.
S050, Small Business Innovative Research		2.239	3.017							Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>The Small Business Innovative Research (SBIR) project is a highly competitive three phase award system which provides qualified small business concerns with the opportunity to propose high quality innovative ideas that meet specific research and development needs of USSOCOM. SBIR is a result of the Small Business Development Act of 1992. It was enacted by Congress in Public Law 97-219, reenacted by Public Law 99-443, and reauthorized by the SBIR Program Reauthorization Act of 1992. Starting in FY 1994, the SBIR program was refocused toward dual use and defense reinvestment efforts. Phase I projects evaluate the scientific technical merit and feasibility of an idea. Awards are up to \$100,000 with a maximum six month period of performance. Phase II projects expand the results of, and further pursue, the developments of Phase I. Awards are up to \$750,000 with a maximum two year period of performance. Phase III is for commercialization of the results of Phase II and requires the use of private or non-SBIR federal funding. DoD publishes government agency proposal projects twice per year for a consolidated DoD Request for Proposal. USSOCOM then awards its proposed SBIR projects.</p>											



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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE FEBRUARY 1997									
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE PE 1160401BB Special Operations Technology Development									
COST (in millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160401BB (Special Operations Technology Development)		3.774	5.865	4.161	4.247	5.329	5.419	4.523	5.180	Cont.	Cont.
S100, Special Operations Technology Development		3.774	5.865	4.161	4.247	5.329	5.419	4.523	5.180	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>Projects provide studies and laboratory prototypes for USSOCOM to link non-system basic research and exploratory development to Special Operations Forces (SOF) specific system engineering and manufacturing development and procurement. This project supports SOF, psychological and civil affairs forces involvement in foreign internal defense and world-wide operations. It also supports special operations forces conduct of special reconnaissance and direct action operations in low, mid, and high intensity conflict. A major objective of the SOF technology base program is to provide a balanced effort of studies and technology base funding across the exploratory research and advanced development categories in order to exploit technological developments of other organizations through aggressive resource leveraging. This resource leveraging (applying small incremental amounts of USSOCOM funding on top of significantly larger research investments by other DoD, government, and commercial organizations) will allow USCINCSOC to influence the direction of technology development or the schedule against which it is being pursued.</p>											



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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S100, Special Operations Technology Development		3.774	5.865	4.161	4.247	5.329	5.419	4.523	5.180	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>This project provides studies and laboratory prototypes for exploratory and advanced development, as well as a means for leveraging other organizations' projects that may not otherwise be affordable within MFP-11. Applying small incremental amounts of investments to DoD, other government agencies, and commercial organizations allows United States Commander-in-Chief Special Operations Command to influence the direction of technology development or the schedule against which it is being pursued and to acquire emerging technology for Special Operations Forces (SOF). This program supports special reconnaissance, information warfare, unconventional warfare, direct action, foreign internal defense, psychological and civil affairs operations, and other SOF missions worldwide. This program provides an investment strategy for USSOCOM to link non-systems technology opportunities to USSOCOM technology development objectives and mission area analyses. Sub-projects include:</p> <ul style="list-style-type: none"> <li>● Active Noise Cancellation. Reduce acoustic signature of SOF propeller craft.</li> <li>● Audio Deception Emitter. Brassboard audio emitter to mimic low frequency audio emissions.</li> <li>● Color Night Vision Fusion. Brassboard prototype for infrared and low-light-level video using artificial color that incorporates SOF size, weight, and human factors requirements.</li> <li>● Enhanced Thermal Protection. Diver thermal protection for combat swimmers during underwater operations in cold water.</li> <li>● Head-Mounted Thermal Vision. Lightweight, low-volume, low-power thermal viewer providing a passive night/obscured</li> </ul>											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100		
<p>vision capability using an uncooled focal plane array. This project leverages other government efforts.</p> <ul style="list-style-type: none"> <li>• Maximum Efficiency Language Training. Joint project with Army Research Institute and Defense Advanced Research Projects Agency to demonstrate an advanced computer based virtual reality interactive language tutor.</li> <li>• Pursuit Deterrent Munitions (PDM) Trainer. A PDM simulator for safe training.</li> </ul> <p>FY 1996 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>• (\$892K) Continued development of the Maximum Efficiency Language Training, Head-Mounted Thermal Vision, and Pursuit Deterrent Munition Trainer. Completed development and transition of Target Marking Technologies. (1QTR96-4QTR96)</li> <li>• (\$152K) Audio Deception Emitter. Started brassboard prototypes that provide spot and large area loudspeaker broadcast capability to influence target audiences with high quality audio deception. (2QTR96-4QTR96)</li> <li>• (\$480K) Demonstrated technologies to remotely detect, characterize, and type classify mines, obstacles, and barriers found in the littoral warfare region. (3QTR96-4QTR96)</li> <li>• (\$425K) Concept Exploration. Conducted studies to assess optimum gas turbine engine alternatives for SOF maritime craft and optimum operating characteristics of a vehicle-mounted, crew-served weapon system. (3QTR96-4QTR96)</li> <li>• (\$1,825K) Classified Project. Reported under separate cover. (2QTR96-4QTR96)</li> </ul> <p>FY 1997 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$1,350K) SOF Command, Control, Communications, Computer, and Intelligence (C4I) Technologies. Complete</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100			
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	<p>development and begin evaluation of the Head-Mounted Thermal Vision. Leverage technology to develop a SOF brassboard prototype of infrared and low-light-level video using artificial color that incorporates SOF size, weight, and human factors requirements. (1QTR97-2QTR97)</p> <ul style="list-style-type: none"> <li>• (\$538K) SOF Mobility Technologies. Develop an Active Noise Cancellation system to reduce onboard noise levels on SOF propeller aircraft. (1QTR97-2QTR97)</li> <li>• (\$716K) SOF Sustainment Technologies. Complete development and evaluation of the Maximum Efficiency Language Training prototype. Complete development and evaluation of the Audio Deception Emitter. Demonstrate an Enhanced Thermal Protection System to maintain performance of SOF combat swimmers during underwater operations in cold water. (1QTR97-2QTR97)</li> <li>• (\$461K) Continue to demonstrate technologies to remotely detect, characterize, and type classify mines, obstacles, and barriers found in littoral warfare region. (3QTR97)</li> <li>• (\$600K) Concept Exploration Studies. Conduct studies to analyze the optimum technology concept for an integrated sensor navigation system and a remote command detonation device in support of the Naval Special Warfare Mine Countermeasures Program. Complete gas turbine engine alternatives and vehicle-mounted, crew-served weapon studies. (2QTR97)</li> <li>• (\$2,000K) Joint Ranger Anti-Armor Anti-Personnel Weapons System (JRAAWS). The Bofors 84-mm M3 Carl Gustof ammunition is being adopted for use by the Naval Special Warfare Command (NAVSPECWARCOM). The ammunition is being tested to ensure insensitive munition requirements are satisfied to allow use by NAVSPECWARCOM operators and storage/transport aboard Navy ships and submarines. Acquire test ammunition and conduct qualification testing against joint service safety and performance requirements. This is a Congressional plus-up; a request has been made to reprogram these funds to PE1160404BB, Project S800. (2QTR97-4QTR97)</li> </ul>		



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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100	
<ul style="list-style-type: none"><li>• (\$200K) Technology Development Exploitation. Exploit emerging technologies to meet critical SOF requirements and encourage industry and government lab participation in identifying enhancements to SOF in critical areas such as reducing size and weight, and improving the life of power supplies. Needs in these areas will be advertized to industry and government research and development agencies via broad area announcements, calls for white papers, and research and development conferences. (3QTR97)</li></ul>			
FY 1998 PLAN:			
<ul style="list-style-type: none"><li>• (\$1,539K) SOF C4I Technologies. Complete evaluation of Head-Mounted Thermal Vision. Continue development of SOF Color Night Vision Fusion device. Exploit technology efforts that provide improvements in weight reduction, size, support, power consumption/management, low probability of intercept/detection, and transmission rates of SOF communication and intelligence systems. Exploit technology efforts for potential improvements in SOF's ability to detect surveillance threats. (2QTR98)</li><li>• (\$712K) SOF Mobility Technologies. Continue development of the Active Noise Cancellation concept. (1QTR98)</li><li>• (\$1,166K) SOF Sustainment Technologies. Complete development and evaluation of Enhanced Thermal Protection effort. Exploit technology efforts to provide enhanced performance and protection of SOF personnel. (2QTR98)</li><li>• (\$544K) Concept Exploration Studies. Explore/validate concepts for projects being continued or initiated in support of the USSOCOM technology development objectives. (3QTR98)</li><li>• (\$200K) Technology Development Exploitation. Exploit emerging technologies to meet critical SOF requirements and encourage industry and government lab participation in identifying enhancements to SOF in critical areas such as reducing size and weight, and improving the life of power supplies. Needs in these areas will be advertized to industry and government research and development agencies via broad area announcements, calls for white papers, and research and development</li></ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project \$100	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	
<p>conferences. (3QTR98)</p> <p>FY 1999 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$975K) SOF C4I Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to research/exploit emerging C4I technologies of the Services and other government agencies. (2QTR99)</li> <li>• (\$850K) SOF Mobility Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to research/exploit emerging mobility technologies of the Services and other government agencies. (2QTR99)</li> <li>• (\$917K) SOF Weapons Technologies. Continue to research/exploit emerging weapons technologies of the Services and other government agencies. (2QTR99)</li> <li>• (\$812K) SOF Sustainment Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to research/exploit emerging sustainment-related technologies of the Services and other government agencies. (2QTR99)</li> <li>• (\$493K) Concept Exploration Studies. Explore/validate concepts for projects being continued or initiated in support of the USSOCOM technology development objectives. (2QTR99)</li> <li>• (\$200K) Technology Development Exploitation. Exploit emerging technologies to meet critical SOF requirements and encourage industry and government lab participation in identifying enhancements to SOF in critical areas such as reducing size and weight, and improving the life of power supplies. Needs in these areas will be advertized to industry and government research and development agencies via broad area announcements, calls for white papers, and research and development conferences. (3QTR99)</li> </ul>	

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160401BB Special Operations Technology Development / Project S100	
ACQUISITION STRATEGY: NA			
B. <u>Program Change Summary</u> Previous President's Budget Appropriated Value Adjustments to Appropriated Value / President's Budget Current Budget Submit			
	FY96	FY97	FY98
	3.969	4.083	4.173
	4.090	6.083	
	(.316)	(.218)	(.012)
	3.774	5.865	4.161
			4.267
			4.247
			Cont.
			Cont.
Change Summary Explanation:			
Funding: The FY 1996 decrease is for Congressional inflation adjustments and overhead / management savings. FY 1997 net decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast.			
Schedule: None.			
Technical: None.			
C. <u>Other Program Funding Summary</u> NA.			
D. <u>Schedule Profile</u> NA.			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE FEBRUARY 1997									
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE PE 1160402BB Special Operations Advanced Technology Development									
COST (in millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160402BB (Special Operations Advanced Tech Dev)		14.515	7.602	8.009	8.171	8.328	8.514	8.701	9.455	Cont.	Cont.
P204, Explosive Ordnance Disposal - Low Intensity Conflict		4.057									21.495
P205, Special Operations / Low Intensity Conflict Studies		.974									3.880
S200, Special Operations Special Technology Development		9.484	7.602	8.009	8.171	8.328	8.514	8.701	9.455	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>Projects provide studies, technology demonstrations and rapid prototyping efforts to provide technology and prototypes to accelerate the acquisition of Special Operations Forces-peculiar equipment. Technology goals are generated annually by USSOCOM with input from components and regional Commanders-in-Chief.</p> <p>Projects P204 and P205 transition to the USD-managed PE 0603122D, "Counterterror Technical Support", in FY 1997.</p>											



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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S200, Special Operations Special Technology		9.484	7.602	8.009	8.171	8.328	8.514	8.701	9.455	Cont.	Cont.
<p><b>A. <u>Mission Description and Budget Item Justification</u></b></p> <p>Special Operations Special Technology (SOST) is an advanced technology development program capable of rapid development and evaluation of prototypes to apply emerging advanced technologies against Special Operations Forces (SOF) deficiencies. It also provides for SOF-peculiar advanced technology demonstrations. A SOST sub-project ends once the prototypes undergo user assessments in an operational environment and a transition package is prepared. A transition package assists in the initiation of or insertion into an acquisition program. The program also addresses projects that are a result of unique joint, special mission, or area-specific needs for which a few-of-a-kind prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase. Sub-projects include:</p> <ul style="list-style-type: none"> <li>• Advanced Sniper Weapon Fire Control. Full wind vector ballistic solution at extended range (1200 meters).</li> <li>• Aircraft Off/On Load System. Demonstrate system to air drop platforms or SOF-unique pallets without the use of material handling equipment.</li> <li>• Clandestine Lighting Systems. Ground- and air-based lighting system(s) that operate at the Generation III maximum sensitivity line and focused to a tight beam.</li> <li>• Communications Helmet. Lightweight, protective headgear with integrated communications for use by SOF during small boat, repelling, and parachute operations.</li> </ul>											

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200		
<ul style="list-style-type: none"> <li>● Decompression Monitor. Time and depth monitor for use in SEAL Delivery Vehicle operations to extend the range of missions.</li> <li>● Hasty Hide Shelter. Lightweight, weatherproof, "quick hide" shelter for SOF personnel providing protection from detection.</li> <li>● Integrated Bridge System. A system that enhances maritime craft bridge-console and operator interface through human factors engineering and integration with console design and displays.</li> <li>● Inter/Intra Team Low-Power Communications. Electro-optic and low probability intercept/low probability detect communication devices for SOF applications.</li> <li>● Intrusion Sensor. A miniature, multi-sensor system to detect local threats.</li> <li>● Limited Effects Submunition. Project leverages Service efforts to provide less-than-lethal delivery capabilities onboard SOF aircraft.</li> <li>● Portable Oxygen Charging System. Demonstrate a capability to reduce SOF logistics support of underwater breathing apparatuses.</li> <li>● Quick Erect Antenna. Improved antenna to reduce set-up time requirements in support of psychological operations.</li> <li>● Remote Miniature Weather Station. Man-portable, air-drop capable weather sensors with a transmission system for terrestrial based unattended weather collection operations.</li> <li>● Sensor Hardening. Laser protection modules for SOF electro-optic devices.</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		
	<ul style="list-style-type: none"><li>● Special Operations Information Warfare Support System. Automated system for civil affairs and psychological operations information support.</li><li>● SOF Enhanced Weapons. Weapons and munitions prototypes for increased range, improved accuracy, and improved performance against hardened targets.</li><li>● Structural Usage Monitor System. Demonstrate accurate flight regime algorithms to extend aircraft component lives.</li><li>● Tactical Communications Management System. A drop-in wireless radio management system and intercom for use in SOF craft.</li><li>● Transport Cradles. Equipment to transport watercraft in military aircraft.</li><li>● Very Slender Vessel Technologies. Demonstrate advanced technologies to minimize signature and wave-shock impact to personnel onboard SOF maritime craft.</li><li>● Weapons Control System. Prototype providing improved accuracy for small arms mounted on SOF water craft.</li></ul>	
FY 1996 ACCOMPLISHMENTS:		
	<ul style="list-style-type: none"><li>● (\$375K) Completed evaluation and transitioned the Tactical Communications Management System, Laser Defense, Special Operations Information Warfare Support System, and Transport Cradles. (1QTR96-4QTR96)</li><li>● (\$4,398K) Continued efforts on the Advanced Sensors, Inter/Intra Team Low Power Communications, Decompression Monitor, Remote Miniature Weather Station, Improved SOF Power Sources, SOF Enhanced Weapons, Advanced Sniper</li></ul>	



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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200		
<p>Weapon Fire Control System (in project S100 prior to FY 1996), Communications Helmet, and Weapons Control System. (1QTR96-4QTR96)</p> <ul style="list-style-type: none"> <li>• (\$3,611K) Conducted advanced technology demonstrations in the following areas:</li> <li>• Special Operations Forces (SOF) Survival Sustainment and Personal Equipment. Specifically, a lightweight, low profile, Hasty Hide Shelter to provide SOF personnel with environmental and camouflage protection. (3QTR96-4QTR96)</li> <li>• Advanced Technologies for SOF Mobility Platforms. Specifically, technologies for Clandestine Lighting Systems to assist SOF aircraft with landings at night, technologies for an Integrated Bridge System to integrate current console functions onboard SOF watercraft while protecting the components and improving human factors, and initiated exploitation of Very Slender Vessel technologies to minimize Special Operations Forces (SOF) maritime craft' signature and the wave-shock impact to personnel onboard. (1QTR96-4QTR96)</li> <li>• Controlled-Effects Weapons Technologies. Specifically, leverage with Service efforts for a "Limited Effects" Submunition to provide less-than-lethal delivery capabilities onboard SOF aircraft. (3QTR96)</li> <li>• Advanced Technologies for Deception, Information Warfare. Specifically, technologies for a Quick Erect Antenna to reduce size and improve set-up time requirements of antenna in support of psychological operations transmissions. (4QTR96)</li> <li>• SOF Command, Control, Communications, Computer, and Intelligence (C4I) Technologies. Demonstrate millimeter wave technology to provide small, low power, clandestine, high data rate communications link for audio and video transmissions. (4QTR96)</li> </ul>			

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200		
<ul style="list-style-type: none"><li>• (\$450K) Leveraged U.S. Army efforts to develop flight regime recognition algorithms with sufficient accuracy to allow replacement of fatigue critical aircraft components based upon actual aircraft usage versus predicted design usage. (2QTR96-3QTR96)</li><li>• (\$650K) Classified project. Reported under separate cover. (2QTR96-3QTR96)</li></ul>			
FY 1997 PLAN:			
<ul style="list-style-type: none"><li>• (\$1,691K) SOF C4I Technologies. Complete evaluation and transition of the Advanced Sensors and Inter/Intra Team Low Power Communications. Continue advanced technology demonstration of the Remote Miniature Weather Station. Complete development and begin evaluation of the Quick Erect Antenna. Leverage U.S. Air Force Sensor Hardening efforts to develop generic laser protection modules for SOF electro-optic devices. (1QTR97-2QTR97)</li><li>• (\$2,351K) SOF Mobility Technologies. Complete user evaluation and transition the Clandestine Lighting System. Complete demonstration and begin user evaluation of the Integrated Bridge System and complete user evaluation of the Very Slender Vessel technologies. Continue development of Structural Usage Monitor System. Demonstrate an Aircraft Off/On Load System to provide SOF with the capability to off/on load air-drop platforms or SOF-unique pallets without the use of material handling equipment. (1QTR97-2QTR97)</li><li>• (\$1,324K) SOF Weapons Technologies. Complete development and begin user evaluation of Weapons Control System, SOF Enhanced Weapons, and Advanced Sniper Weapon Fire Control. (2QTR97-3QTR97)</li><li>• (\$1,381K) SOF Sustainment Technologies. Complete user evaluation and begin transition of the Communications Helmet. Complete development and user evaluation of the Hasty Hide Shelter and Communications Helmet. Demonstrate an Intrusion Sensor System to provide the SOF operator with the capability to detect local threats. Demonstrate a Portable Oxygen</li></ul>			

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200	
<p>Charging System to reduce the SOF logistics support required (while forward deployed) for underwater breathing apparatuses. (2QTR97)</p> <ul style="list-style-type: none"> <li>• (\$500K) Technology Exploitation Initiative. Exploit emerging technology to meet critical Special Operations Forces (SOF) requirements and encourage industry and Government Lab participation in identifying enhancements to SOF in critical areas. Need in these areas have been advertised to industry and government research and development agencies via Broad Agency Announcements and research and development conferences. (3QTR97)</li> <li>• (\$355K) Classified project. Reported under separate cover. (2QTR97)</li> </ul> <p>FY 1998 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$2,888K) SOF C4I Technologies. Complete demonstration and user evaluation of Remote Miniature Weather Station, Quick Erect Antenna, and Sensor Hardening. Exploit emerging technology to conduct Advanced Technology Demonstrations (ATDs) that provide improvements in weight reduction, size, support, power consumption/management, low probability of intercept/detection, and transmission rates of SOF communication and intelligence systems. Exploit emerging technology to conduct ATDs that provide SOF with improvements in their ability to detect, track, and maintain surveillance of threats/targets. (1QTR98-3QTR98)</li> <li>• (\$1,854K) SOF Mobility Technologies. Complete demonstration and user evaluation of Structural Usage Monitor System, Integrated Bridge System, and Aircraft Off/On Load System. Exploit emerging technology to conduct ATDs to provide SOF mobility platforms with enhanced visibility in adverse weather. (1QTR98-3QTR98)</li> <li>• (\$1,171K) SOF Weapons Technologies. Complete user evaluation of the Weapon Control System and Advanced Sniper Weapon Fire Control. Exploit emerging technology to conduct ATDs that provide enhanced flexibility and increased accuracy of weapons and munitions. (1QTR98-3QTR98)</li> </ul>		

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FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200	
<ul style="list-style-type: none"> <li>• (\$1,596K) SOF Sustainment Technologies. Complete demonstration and user evaluation of the Intrusion Sensor System. Continue development of the Portable Oxygen Charging System. Exploit emerging technology to conduct ATDs to provide SOF combat swimmers with improved mission readiness. Exploit emerging technologies to conduct ATDs that provide SOF with increased situation/information awareness and intelligence awareness during their missions. (1QTR98-3QTR98)</li> <li>• (\$500K) Technology Exploitation Initiative. Exploit emerging technology to meet critical Special Operations Forces (SOF) requirements and encourage industry and Government Lab participation in identifying enhancements to SOF in critical areas. Need in these areas have been advertised to industry and government research and development agencies via Broad Agency Announcements and research and development conferences. (3QTR98)</li> </ul>		
FY 1999 PLAN:		
<ul style="list-style-type: none"> <li>• (\$1,936K) SOF C4I Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to exploit emerging technology to conduct ATDs that provide improvements in weight reduction, power consumption/management, low probability of intercept/detection, and transmission rates of SOF communication and intelligence systems. Continue to exploit emerging technology to conduct ATDs that provide SOF with improvements in their ability to detect, track, and maintain surveillance of threats. (1QTR99-3QTR99)</li> <li>• (\$1,925K) SOF Mobility Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to exploit emerging technology to conduct ATDs to improve performance, lower the probability of detection, or improve the support of SOF mobility platforms. (1QTR99-3QTR99)</li> <li>• (\$1,685K) SOF Weapons Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to exploit emerging technology to conduct ATDs that provide increased lethality, enhanced flexibility, reduced weight and volume, increased accuracy, controllability, and safety of explosive charges and weapons. Continue to exploit emerging</li> </ul>		

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200	
<p>technology to conduct ATDs that provide SOF weapons with improvements in the responsiveness, stand-off, accuracy, reliability, and target effects. (1QTR99-3QTR99)</p> <ul style="list-style-type: none"> <li>• (\$2,125K) SOF Sustainment Technologies. Continue development of FY98 sub-projects to completion and evaluation. Continue to exploit emerging technology to conduct ATDs that will provide enhanced performance, sustainment, and protection of SOF personnel. (1QTR99-3QTR99)</li> <li>• (\$500K) Technology Exploitation Initiative. Exploit emerging technology to meet critical Special Operations Forces (SOF) requirements and encourage industry and Government Lab participation in identifying enhancements to SOF in critical areas. Need in these areas have been advertised to industry and government research and development agencies via Broad Agency Announcements and research and development conferences. (3QTR99)</li> </ul>		
ACQUISITION STRATEGY: NA		
B. <u>Program Change Summary</u> Previous President's Budget Appropriated Value Adjustments to Appropriated Value / President's Budget Current Budget Submit		
	FY96 9.985 10.443 (.959) 9.484	FY97 7.927 7.927 (.325) 7.602
	FY98 8.105 Cont. Cont. Cont.	FY99 8.287 Cont. Cont. Cont.
		Total Cost Cont. Cont. Cont.

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160402BB Special Operations Advanced Technology Development / Project S200	
<p>Change Summary Explanation:</p> <p><b>Funding:</b> The FY 1996 adjustments reflect a Congressional add and reductions due to Congressional inflation adjustments and overhead/management savings and a decrease for revised OMB economic assumptions. FY 1997 decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast.</p> <p><b>Schedule:</b> None.</p> <p><b>Technical:</b> None.</p> <p><b>C. <u>Other Program Funding Summary</u></b> NA.</p> <p><b>D. <u>Schedule Profile</u></b> NA.</p>			



RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE FEBRUARY 1997									
APPROPRIATION/BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE										PE 1160404BB Special Operations Tactical Systems Development
	COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160404BB Special Operations Tactical Systems Development		105.201	93.855	73.073	86.216	93.021	109.128	111.938	83.086	Cont.	Cont.
D476, PSYOPS Advanced Development		1.100	.660	1.199	14.477	1.988	1.112	2.645	.319	Cont.	Cont.
D615, SOF Aviation		3.552	2.145	5.942	7.220	6.661	11.827	8.856	8.268	Cont.	Cont.
SF100, Aviation Systems Advanced Development		5.680	1.570	2.396	16.588	19.334	15.114	11.373	15.564	Cont.	Cont.
SF200, CV-22 SOF Osprey		0	0	0	0	10.017	10.428	10.151	11.436	Cont.	Cont.
S0417, Underwater Systems Advanced Development		29.861	21.796	24.229	2.318	5.227	12.446	10.323	5.752	Cont.	Cont.
S1684, SOF Surface Craft Advanced Development		8.419	6.783	0	0	0	2.980	5.958	4.972	Cont.	Cont.
3284, SOF Aircraft Defensive Systems		10.744	6.413	8.155	5.464	20.115	17.434	11.383	10.015	Cont.	Cont.
3326, AC-130U		4.282	14.495	6.009	1.164	1.386	1.375	.755	.759	6.699	Cont.
3642, Aircrew Training Systems		18.831	4.262	0	0	0	0	0	0	0	204.646



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APPROPRIATION/BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development													
COST (in millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost				
S350, Special Operations Forces Planning and Rehearsal System		7.997	7.339	5.640	4.072	3.801	3.535	3.275	3.024	Cont.	Cont.				
S375, Weapons and Support Systems Advanced Development		.147	3.801	4.109	2.548	4.100	2.525	.463	.276	Cont.	Cont.				
S625, SOF Training Systems		4.441	9.759	9.564	24.777	11.359	12.907	29.197	1.933	Cont.	Cont.				
S700, Communications Advanced Development		.730	2.604	2.130	2.890	2.601	2.212	2.077	2.205	Cont.	Cont.				
S800, Special Operations Munitions Advanced Development		9.357	12.208	3.700	4.698	6.432	15.233	15.482	18.563	Cont.	Cont.				
S900, Special Operations Miscellaneous Equipment Development		.60	.20	0	0	0	0	0	0	0	8.399				
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>Projects provide for development, testing, and integration of specialized equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods and in locations requiring small unit autonomy. SOF must infiltrate by land, sea, and air to conduct unconventional warfare, direct action, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to threat forces to ensure mission success.</p>															

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D476									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
D476, PSYOP Advanced Development	1.100	.660	1.199	14.477	1.988	1.112	2.645	.319	Cont.	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>This program provides for the development and acquisition of Psychological Operations (PSYOP) equipment. The purpose of PSYOP is to reinforce foreign or hostile attitudes and behavior favorable to U.S. national objectives. New and emerging national, regional, and ethnic power groupings and religious fanaticism have increased threats of terrorism, insurgency, instability, and subversion. Successful PSYOP can lower the morale and reduce efficiency of enemy forces and create dissidence within their ranks. This project funds replacement of existing 1950's and 1960's technology equipment currently employed, and provides enhanced capability to conduct tactical and theater-level PSYOP dissemination in support of regional unified commanders and their deployed task forces. The PSYOP programs funded in this project are grouped by the level of organization they support: Operational Element (Team) and Above Operational Element (Deployed). Sub-projects include:</p> <p><b>OPERATIONAL ELEMENT (TEAM)</b></p> <ul style="list-style-type: none"> <li>Family of Loudspeakers (FOL). The FOL will be deployed by PSYOP Loudspeaker Teams and Mobile Audio/Visual Teams to target areas in support of Special Operations Forces and conventional forces. FOL will permit the conduct of loudspeaker missions over larger areas than present equipment capability allows and will provide a greater stand-off distance for US forces/assets. The FOL will consist of modular amplifiers and speakers that will provide high quality recorded audio, live dissemination, and limited acoustic deception capability. Amplifiers and speakers will be transported, operated, and mounted in ground vehicles, watercraft, and rotary wing aircraft, and dismounted for ground operations (tripod/manpack). The basic system, or manpack, is comprised of a modular amplifier and modular speaker(s) weighing 35 lbs or less.</li> </ul>											

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<ul style="list-style-type: none"><li>Leaflet Delivery Systems (LDS). This program develops a family of leaflet delivery systems to provide Psychological Operations (PSYOP) forces the capability to disseminate large quantities of leaflets over a wide geographic range to include denied areas. This system supports PSYOP operational requirements for numerous mission scenarios. LDS consists of multiple configurations to meet delivery requirements for various leaflet missions and environments. Current configurations include Guided Precision Aerial Delivery System-Light (GPADS-L); Staged Leaflet Delivery System (SLDS); and Precision Guidance Canister Bomb (PGCB).</li></ul>		
ABOVE OPERATIONAL ELEMENT (DEPLOYED)		
<ul style="list-style-type: none"><li>Special Operations Media System (SOMS) B. A rapid deployable, C-130 drive on/drive off tactical radio/TV broadcast, reception and electronic news gathering system. This system replaces 1950-1960s technology and enhances the capability to conduct tactical level PSYOP dissemination in support of regional unified commanders. Reduces the airlift requirement from 7 C-130 aircraft to 2 C-130 aircraft.</li><li>Deployable Print Production Center (DPPC). A rapid deployable, state-of-the-art computerized digital system capable of creating, editing and producing printed PSYOP products in forward locations and remote sites. The DPPC will be shelter-mounted on a heavy HMMWV with C-130 roll-on/roll-off capability. The system is comprised of a computerized development workstation with multiple input sources (graphics, color scanner, etc.), desktop publishing, highspeed digital color duplicator, and paper cutter. Reduces airlift from one C-5 aircraft to one C-130 aircraft. With this capability, PSYOP forces will now be able to respond and deploy rapidly to forward locations and remote sites in support of theater CINC OPLANS and CONPLANS, with the ability to produce PSYOP printed product immediately upon arrival.</li><li>Special Operations Media System (SOMS) A. SOMS A is an operational/strategic mobile television/radio wide area broadcast system which is C-17/C-141 deployable. It will receive and transmit real-time PSYOP products to and from commercial and military sources by satellite and microwave. SOMS A will be interoperable with the fixed site media production center at Fort Bragg, NC, Theater Media Production Center, Air National Guard Commando Solo aircraft, and the tactical Special</li></ul>		

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<p>Operations Media System (SOMS) B.</p> <p>FY 1996 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>• (\$647K) Family of Loudspeakers. Awarded basic contract for delivery of production qualification test article. (3QTR96)</li> <li>• (\$289K) Deployable Print Production Center. Conducted Milestone 0/I review. Conducted market research and evaluated non-developmental item equipment based on operator evaluation of the DPPC prototype developed as a Special Operations Special Technology project. (2QTR96-4QTR96)</li> <li>• (\$164K) SOMS B. Provided continued test support. (2QTR96-3QTR96)</li> </ul> <p>FY 1997 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$190K) SOMS B. Provide continued test support. (1QTR97-4QTR97)</li> <li>• (\$282K) SOMS A. Conduct Milestone 0 review. Begin research and development efforts with analysis of SOMS B lessons learned and market research of available non-developmental item equipment. Initiate SOMS A architecture study group. Update SOMS A concept study. (2QTR97-3QTR97)</li> <li>• (\$188K) Leaflet Delivery System (LDS). Conduct Milestone 0/I and Milestone II reviews. Update LDS concept study. Perform DT/OT of SLDS Variant. (2QTR97-3QTR97)</li> </ul>			

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D476		
FY 1998 PLAN:			
	<ul style="list-style-type: none"><li>• (\$1,050K) Special Operations Media System (SOMS) A. Conduct Milestone I review. Conduct Milestone II review. Complete market research and finalize system specifications and configuration. (2QTR98-4QTR98)</li><li>• (\$149K) Leaflet Delivery System. Complete development test / operational test and conduct Milestone III for Staged Leaflet Delivery System Variant. (2QTR98)</li></ul>		
FY 1999 PLAN:			
	<ul style="list-style-type: none"><li>• (\$14,184K) SOMS A. Conduct DT/OT and conduct Milestone III review. Award basic development contract with production options. Initiate SOMS A system number 1 integration. (2QTR99-4QTR99)</li><li>• (\$293K) SOMS B. Provides funding for evolutionary technology insertions to include broadcast quality video transfer, achieving antennae objective range requirements, and other objective requirements not achieved during operational test. (2QTR99)</li></ul>		
ACQUISITION STRATEGY:			
	<ul style="list-style-type: none"><li>• SOMS A. SOMS A will be a full and open competitive procurement to take maximum advantage of commercial broadcast industry "best practices." Following an FY97 update of the SOMS A concept study currently in progress at USSOCOM, market research will be conducted to identify potential sources. A competitive award of the basic SOMS A contract with production options is planned for FY99. SOMS A will follow an evolutionary acquisition strategy which provides phased periodic technological insertions to meet objective operational requirements which are not achievable at initial fielding.</li></ul>		

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D476									
<u>B. Program Change Summary</u>		FY96	FY97	FY98	FY99	Total Cost					
Previous President's Budget		.295	.484	1.436	14.251	Cont.					
Appropriated Value		.295	.484								
Adjustments to Appropriated Value / President's Budget		.805	.176	(.237)	.226						
Current Budget Submit		1.100	.660	1.199	14.477	Cont.					
Change Summary Explanation:											
Funding:		The FY 1996 net increase is the result of a Congressional reduction for inflation adjustments and overhead/management savings and increase in Special Operations Media System (SOMS) B. FY 1997 adjustment includes cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, Congressional adjustment to Defense-wide investment appropriations, and increase for SOMS B testing. FY 1998 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast. FY 1999 adjustment is repricing of budgets to reflect the Administration's revised economic forecast and an increase due to revised cost estimate for SOMS A.									
Schedule:		Schedule adjustments are due to program restructures.									
Technical:		None.									
<u>C. Other Program Funding Summary</u>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, Psyop Equipment		16.914	8.218	10.280	4.916	16.292	11.659	3.957	6.925	Cont.	Cont.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)										DATE		FEBRUARY 1997									
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D476											
										FY96		FY97		FY98		FY99					
										1	2	3	4	1	2	3	4	1	2	3	4
D. <u>Schedule Profile</u>																					
Special Ops Media System (SOMS) B																					
Test and Logistics Spt										x											
DT/OT																					
MS III																				x	
Technology Insert																					
Family of Loudspeakers																					
Test Article Production Contract												x									
MS III														x							
Deployable Print Production Center										x											
MS 0/I																					
MS II																					
MS III												x									
SOMS A																					
MS 0														x							
MS I																x					
MS II																x					
DT/OT																		x			
Leaflet Delivery System																					
MS 0/I (SLDS)														x							
MS II (SLDS)																		x			
DT/OT (SLDS)																		x			
MS III/FUE (SLDS)																				x	

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project D476		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u> <u>FY99</u>
1. Family of Loudspeakers (DT/OT)	647		
2. Deployable Print Production Center			
Contractor Engineering Support	77		
Integrated Logistics Support	25		
Government Engineering Support	45		
Development Support Equipment Acquisition	142		
3. Leaflet Delivery System			
Contractor Engineering Support		138	74
DT/OT		50	75
4. Special Operations Media System - A			
Contractor Engineering Support		282	750
Government Engineering Support			300
Prototype Equipment Acquisition			284
5. Special Operations Media System - B			13,900
Contractor Engineering Support	27		
Integrated Logistics Support	105	65	
DT/OT	32		
Technology Insertion		125	293
TOTAL:	1,100	660	1,199      14,477

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project D476			
B. Budget Acquisition History and Planning Information													
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program		
Product Development Organizations USSOCOM, Tampa FL Army, CECOM, Ft Monmouth NJ DOE, Nat'l Engr Lab, Idaho Falls ID TBD MISC	REQN	Var	Cont.	Cont.	5,457	142					Cont.		
	ALLOT	Var	Cont.	Cont.	3,240	647					Cont.		
	MIPR	Var 93	Cont.	Cont.							Cont.		
	Var	Var	N/A	N/A							Cont.		
	C/FPI	Mar 99	13,900	13,900					14,193		N/A		
Support and Management Organizations SOFSA, Lexington KY LOGSA, Redstone Arsenal AL Booz-Allen & Hamilton, McLean VA MISC	MIPR	May 93			53	130					Cont.		
	MIPR	VAR			161	77	65				Cont.		
	CPFF	Oct 93	Var	Var		72	420	1,124	284		N/A		
	Var	Var											
Test and Evaluation Organizations JITC, Ft Huachuca AZ Army ATC, Aberdeen Proving Gd MD MISC	MIPR	Mar 94			202	32	125				Cont.		
	MIPR	Aug 94			193		50	75			Cont.		
	Var	Var	Var	Var							N/A		
Government Furnished Property													
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program		
Subtotal Product Development					8,697	789			14,193	Cont.	Cont.		
Subtotal Support and Management					214	279	485	1,124	284	Cont.	Cont.		
Subtotal Test and Evaluation					395	32	175	75		Cont.	Cont.		
Total Project					9,306	1,100	660	1,199	14,477	Cont.	Cont.		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D615									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
D615, SOF Aviation		3.552	2.145	5.942	7.220	6.661	11.827	8.856	8.268	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>A requirement exists to provide aviation support to Special Operations Forces (SOF) in world-wide contingency operations and low-intensity conflicts. The specialized aircraft for these missions must be capable of rapid deployment and undetected penetration of hostile areas. These aircraft must be capable of operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract SOF. The threat is characterized by an extensive and sophisticated ground based air defense system and an upgraded air-to-air capability targeted against helicopters. Third World operations are apt to involve greater distances and more challenging geographical environmental conditions than the European theater. This project will develop/upgrade the Special Operations rotary wing aircraft systems that will be capable of successful operations in these increasingly hostile environments. Rotary wing systems supported by this project include: A/MH-6, MH-60G/L/K, MH-53J, TH-53A, and MH-47D/E. Efforts include:</p> <ul style="list-style-type: none"> <li>● A/MH-6. (1) Develops lightweight, rapid reconfigurable mission support equipment. (2) Prototypes and tests structural fuselage modifications to increase the maximum gross weight by 25 %.</li> <li>● MH-47E/MH-60K. (1) Develops and tests aircraft survivability equipment hardware and software. (2) Develops and tests the MH-60 fuel control system, conducts Congressionally mandated Live Fire testing on the MH-47E and MH-60K, develops and tests ballistically tolerant composite small arms protection system for vulnerable helicopter systems. (3) Develops and tests cockpit, hardware, and software improvements to communications and navigation systems.</li> </ul>											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D615	
<ul style="list-style-type: none"><li>MH-53J. (1) Conducts independent verification and validation of the software modules developed for the Interactive Defensive Avionics System/Multi-Mission Advanced Tactical Terminal modification; (2) Develops and installs software and hardware interfaces to allow flight line reprogramming of the ALQ-162 Electronic Countermeasures Jammer.</li></ul>			
FY 1996 ACCOMPLISHMENTS:			
<ul style="list-style-type: none"><li>(\$2,500K) A/MH-6. Developed and tested a Full Authority Digital Electronic Control (FADEC) for the A/MH-6. (4QTR96)</li><li>(\$1,052K) MH-53J. Conducted independent verification and validation of the software modules developed for the Interactive Defensive Avionics System/Multi-Mission Advanced Tactical Terminal modification and developed software and hardware interfaces to allow flight line reprogramming of ALQ-162 Electronic Countermeasure Jammers. (3QTR96-4QTR96)</li></ul>			
FY 1997 PLAN:			
<ul style="list-style-type: none"><li>(\$243K) MH-53J. Conduct independent verification and validation of software module changes developed for IDAS/MATT modification. (2QTR97-3QTR97)</li><li>(\$902K) MH-47/MH-60. Develop software and hardware to accommodate U.S. Army funded common engineering change proposals for the CH-47D and UH-60L in SOF MH-47E/MH-60K aircraft. (2QTR97-3QTR97)</li><li>(\$1,000K) A/MH-6. Continues FADEC development and testing. (1QTR97-4QTR97)</li></ul>			
FY 1998 PLAN:			
<ul style="list-style-type: none"><li>(\$149K) MH-53J. Participate in Air Force Mission Support System (AFMSS) software aircraft/weapon/electronic development. (1QTR98-2QTR98)</li></ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D615		
<ul style="list-style-type: none"> <li>• (\$2,638K) MH-47/MH-60. Develop and prototype a power amplifier to improve the effectiveness of the continuous wave/pulse wave jamming systems and an exhaust suppressor to reduce the infrared signature of the MH-47 helicopter. (1QTR98-2QTR98)</li> <li>• (\$1,480K) MH-47/MH-60. Develop and test integrated fuel control systems for the MH-60 helicopter. Design and start development of a ballistically tolerant composite small arms aircraft protection system. (1QTR98-2QTR98)</li> <li>• (\$633K) MH-47/MH-60. Start integration and testing of a digital map system for the MH-47D and MH-60L Direct Action Penetrator. Start development of the weather radar drop-in card for the Multi-Mode RADAR for the MH-47E and MH-60K. (2QTR98-3QTR98)</li> <li>• (\$1,042K) A/MH6. Develop lightweight, rapid reconfigurable mission support equipment. Prototype and test structural fuselage modifications to increase the maximum gross weight by 25 %. (1QTR98-2QTR98)</li> </ul> <p>FY 1999 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$3,800K) MH-47/MH-60. Start development and integration of an Aircraft Survivability Equipment controller. Start integration and testing of an Infrared Jammer on the MH-47 helicopter. (2QTR99-3QTR99)</li> <li>• (\$1,206K) MH-47/MH-60. Conduct Congressionally mandated Live Fire Testing on MH-47E/MH-60K components. Continue development of a ballistically tolerant composite small arms aircraft protection system. (2QTR99-3QTR99)</li> <li>• (\$1,766K) MH-47/MH-60. Continue integration and testing of a digital map system for the MH-47D and the MH-60L Direct Action Penetrator. Continue development of the weather radar drop-in card for the Multi-Mode RADAR for the MH-47E and MH-60K. (1QTR99-2QTR99)</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D615			
<ul style="list-style-type: none"><li>● (\$448K) A/MH-6. Continue development of lightweight, rapid reconfigurable mission support equipment. (1QTR99-2QTR99)</li></ul>					
ACQUISITION STRATEGY: NA.					
B. <u>Program Change Summary</u>					
Previous President's Budget					
Appropriated Value					
Adjustments to Appropriated Value / President's Budget					
Current Budget Submit					
		FY96	FY97	FY98	FY99 Total Cost
		3.426	1.163	1.340	28.419 Cont.
		3.445	2.163		
		.107	(.018)	4.602	(21.199)
		3.552	2.145	5.942	7.220 Cont.
Change Summary Explanation:					
Funding:					
FY 1996 increase reflects increased requirement for independent validation and verification of software modules for the Interactive Defensive Avionics System/Multi-Mission Advanced Tactical Terminal (IDAS/MATT) modification. FY 1997 net decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 adjustment is due to repricing of budgets to reflect the Administration's revised economic forecast and increased requirements for modernization in Aircraft Survivability Equipment and Pre-programmed Product Improvements across the USSOCOM rotary wing fleet. FY 1999 decrease reflects adjustments to utilize service common modernization efforts, a USSOCOM modernization reprioritization based upon fiscal constraints, and repricing of budgets to reflect the Administration's revised economic forecast.					

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE		FEBRUARY 1997										
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7						R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project D615												
Schedule: None.																		
Technical: None.																		
C. <u>Other Program Funding Summary</u>																		
PROC, OH-6 Proc/Mods						FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost			
								7.997							15.308			
PROC, Rot. Wing Upgds & Sustainment						9.901	5.858	36.042	56.034	44.955	30.666	30.936	57.852	Cont.	Cont.			
								FY96		FY97		FY98		FY99				
							1	2	3	4	1	2	3	4	1	2	3	4
D. <u>Schedule Profile</u>								x										
IDAS/MATT IV&V Contract Award								x										
ALQ-162 Contract Award / MS II								x										
A/MH-6 FADEC Contract Award										x								
Mission Enhanced Little Bird MSIIIB												x						
MH-47E/MH-60K																		
Begin ECP Integration										x								
Power Amplifier Contract Award												x						
MH-60 Fuel Panel Contract Award												x						
ASE Controller Contract Award														x				
Multimode Radar Weather Card MS II																x		

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project D615		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u> <u>FY99</u>
1. IDAS/MATT IV&V	769	243	149
2. ALQ-162	283		
3. MH-47/MH-60 Modifications		902	4,751 6,772
4. A/MH-6 Modifications	2,500	1,000	1,042 448
<b>TOTAL:</b>	<u>3,552</u>	<u>2,145</u>	<u>5,942</u> <u>7,220</u>

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
R-1 ITEM NOMENCLATURE										PROJECT D615	
APPROPRIATION / BUDGET ACTIVITY										PE 1160404BB Special Operations Tactical Systems Development / Project D615	
RDT&E, DEFENSEWIDE / 7											
B. Budget Acquisition History and Planning Information										Actual or Budget Value (\$ in thousands)	
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations IDAS/MATT, WR-ALC ALQ-162, WR-ALC, NAS MH-47/60, PM-TAPO A/MH-6, PM-MELB	Var	Var				594	243	149			986
	Var	Var				147					147
	Var	Var					727	4,037	5,751	Cont.	Cont.
	Var	Var				2,500	1,000	880	448	Cont.	4,828
Support and Management Organizations IDAS/MATT, WR-ALC ALQ-162, WR-ALC MH-47/60, PM-TAPO	Var	Var				105					105
	Var	Var				86				Cont.	86
	Var	Var								Cont.	Cont.
Test and Evaluation Organizations IDAS/MATT, AFOTEC ALQ-162, SMOTEC MH-47/60, PM-TAPO A/MH-6, PM-MELB	Var	Var				70					70
	Var	Var				50					50
	Var	Var					175	714	1,021	Cont.	Cont.
	Var	Var						162			162
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Subtotal Product Development						3,241	1,970	5,066	6,199	Cont.	Cont.
Subtotal Support and						191				Cont.	Cont.
Subtotal Test and Evaluation						120	175	876	1,021	Cont.	Cont.
Total Project						3,552	2,145	5,942	7,220	Cont.	Cont.





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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project SF100												
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost			
SF100, Aviation Systems Advanced Development		5.680	1.570	2.396	16.588	19.334	15.114	11.373	15.564	Cont.	Cont.			

A. Mission Description and Budget Item Justification

This project investigates already developed and maturing technologies that have direct application for the development and procurement of specialized equipment to meet unique SOF aviation requirements. Timely application of SOF-unique technology is critical and necessary to meet requirements in such areas as: Low Probability of Intercept/Low Probability of Detection (LPI/LPD) radio frequency radar; LPI formation/rendezvous flight; digital terrain elevation data and electronic order of battle; digital maps; LPI radar altimeter; display technology; situational awareness; near-real-time intelligence to include data fusion; laser radar/millimeter wave radar obstacle avoidance; imagery; threat detection and avoidance; electronic support measures for threat geolocation and specific emitter identification; navigation; target detection and identification technologies; and studies for future SOF aircraft requirements. Sub-projects include:

- AC-130H Weight Reduction. This program removes weight and restores the ability to configure appropriately for all combat missions by correcting center of gravity (CG) problems. Drag reduction is also addressed as an integral part of weight and CG improvements to enhance aircraft performance.
- AC-130U/H AAQ-26 Forward Looking Infrared Detection Set (IDS) Upgrade. Modifies the optics on the existing AN/AAQ-17 IDS and Enhanced AN/AAQ-17E IDS currently installed on 19 AC-130U/H aircraft. The modification will substantially increase the magnification and resolution of the IDS thus allowing the aircrew to identify friendlies/targets while operating outside the range of threat systems.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project SF100		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	<ul style="list-style-type: none"> <li>AC-130U P3I. Provides correction of system deficiencies and enhancement of mission capabilities for 13 AC-130U Gunships. Develops fixes for problems identified under the original AC-130U development contract, but determined to be out of scope for that effort.</li> <li>Aviation Engineering Analysis. Provides a rapid response capability to support SOF fixed wing aircraft. The purpose is to correct systems deficiencies, improve asset life, and enhance mission capability through the means of feasibility studies and engineering analyses. The sub-project provides the engineering required to improve the design and performance integrity of the aircraft support systems, sub-systems equipment, and embedded computer software as they relate to the maintenance, overhaul, repair, quality assurance, modifications, material improvements and service life extensions.</li> <li>MC-130H Combat Talon II Air Refueling System. Converts the MC-130H Combat Talon II into a deep penetrating, air refueling (AR) tanker capable of simultaneous refueling of two rotary and/or tilt-wing receivers. Air refueling pod replacement for 30 year old MC-130E and HC-130P/N hydromechanical hose reel design with a design that requires fewer parts and decreases weight. Enhanced internal fuel tanks replace the existing non-jettison tanks. The system will support ground forward area refueling point (FARP) operations, be capable of supporting small rolling stock, cargo, personnel, will be field loadable, four-man portable when empty. Tanks will be ballistic resistant against small arms up to 50 cal and Anti-Aircraft Artillery up to 14.55 mm. Enhanced 6 o'clock view will replace existing paratroop door window with a window that will provide increased awareness of receivers approaching the pre-contact position and while refueling.</li> </ul> <p>FY 1996 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>(\$2,984K) AC-130H Low Light Level TV. Awarded a sole-source contract for preliminary engineering studies. (3QTR96)</li> <li>(\$2,675K) Low Probability of Interception (LPI) Penetration Aids. Continued flight evaluation of LPI modified avionics. (4QTR96)</li> </ul>	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project SF100		
<ul style="list-style-type: none"> <li>• (\$21K) AAQ-26 Forward Looking Infrared Detection Set Upgrade. Supported program management operations. (2QTR96-4QTR96)</li> </ul> <p>FY 1997 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$1,370K) Aviation Engineering Analysis. Conduct a vulnerability assessment study for the AC-130H weight reduction effort and continue engineering analyses of SOF Fixed Wing Aircraft Avionics and Sensors. (2QTR97)</li> <li>• (\$200K) AC-130H Ammo Racks. Begins program management support of the development/design of a prototype ammo rack. (2QTR97-4QTR97)</li> </ul> <p>FY 1998 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$110K) AC-130H Weight Reduction. Completes development/design of a prototype ammo rack. (1QTR98)</li> <li>• (\$997K) AC-130U P3I. Begin activities for upgrade of Gunship APQ-180 Radar. (3QTR98)</li> <li>• (\$1,289K) Aviation Engineering Analysis. Continue engineering analyses of SOF Fixed Wing Aircraft Avionics and Sensors. (1QTR98-4QTR98)</li> </ul> <p>FY 1999 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$1,901K) AC-130U/H AAQ-26 Infrared Detection Set (IDS) Upgrade. Conduct a study and analysis of integration of upgraded AAQ-17 to the AC-130U trainer. (2QTR99)</li> <li>• (\$738K) AC-130H Weight Reduction. Begin development of lighter weight 105mm gunmount and new lighter weight armor</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project SF100	
<p>panels. (1QTR99)</p> <ul style="list-style-type: none"> <li>• (\$3,319K) AC-130U P3I. Begin development efforts for upgrade of the Gunship mission computer to solve reliability problems and increase system memory and throughput capacity. (2QTR99)</li> <li>• (\$1,307K) Aviation Engineering Analysis. Conduct a study and analysis for various preplanned product improvements to the AC-130U Gunship. Continue engineering analysis of SOF Fixed Wing Aircraft Avionics and Sensors. (1QTR99-4QTR99)</li> <li>• (\$9,323) MC-130H Combat Talon II Air Refueling System. Begin design of group A and B for Air Refueling Pod and variable speed drogue. Begin design of Enhanced Six o'Clock View Kit. Begin design of Group B Internal Tanks. (2QTR99)</li> </ul> <p>ACQUISITION STRATEGY:</p> <ul style="list-style-type: none"> <li>• AC-130H Weight Reduction. Three phased approach. First phase, design a prototype of a lighter weight ammo rack. Install new ammo racks. Second phase removes armor that can be removed based on results of vulnerability assessment study. Plan on competing development/installation of new lighter weight armor. Last phase further reduces weight by replacing existing gunmount(s) with lighter weight ones.</li> <li>• AC-130U/H AAQ-26 Infrared Detection Set (IDS) Upgrade. Award a fixed firm price sole source contract to Texas Instruments with production options. Texas Instruments will sub-contract to Lockheed for integration of the AAQ-26 on the AC-130H aircraft.</li> <li>• AC-130U Mission Computer Upgrade. Pursue a phased modification of 52 mission computers to incorporate improvements to reliability, memory, and throughput capacity.</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		FEBRUARY 1997
<p>APPROPRIATION / BUDGET ACTIVITY RDT&amp;E, DEFENSEWIDE / 7</p>	<p>R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project SF100</p>	
<p>• MC-130H Combat Talon II Air Refueling System. Competitive source selection, contract type is to be determined. Down-select to one developer for design, prototype development and test.</p>		
<p><u>B. Program Change Summary</u></p>		
Previous President's Budget	FY96	FY97
Appropriated Value	6.488	4.006
Adjustments to Appropriated Value / President's Budget	7.634	4.006
Current Budget Submit	(1.954)	(2.436)
	5.680	1.570
		2.396
		4.928
		16.588
		Cont.
<p>Change Summary Explanation:</p>		
<p>Funding: The FY 1996 decrease was due to revised OMB economic assumptions and restructuring of the Ring Laser Gyro program. FY 1997 and FY 1998 decreases reflect project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations and cancellation of LIDAR. FY 1999 adjustments are repricing of budgets to reflect the Administration's revised economic forecast and increases based upon revised cost estimates for AAQ-26 FLIR, AC-130U P3I and AC-130H weight reduction.</p>		
Schedule:	None.	
Technical:	None.	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)				DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project SF100								
<b>C. <u>Other Program Funding Summary</u></b>										
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, C-130 Mods*	9.341	16.240	5.228	18.732	17.140	44.971	37.459	45.444	Cont.	Cont.
*Includes C-130 Modifications sub-line item funds for AC-130U/H AAQ-26 Infrared Detection Set Upgrade, AC-130H Low Light Level Television replacement, AC-130U P3I, AC-130H Weight Reduction, and MC-130H Air Refueling System.										
<b>D. <u>Schedule Profile</u></b>										
AC-130H LLLTV Contract Award for Studies										
AC-130U Mission Computer Study										
AC-130H Vulnerability Assessment Study Award										
MC-130H Air Refueling Contract Award										

RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project SF100		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	FY96	FY97	FY98
1. AC-130H Low Light Level TV Replacement	2,984	328	
2. LPI Penails	2,675		
3. SOF Aviation Engineering Analyses		1,042	1,307
4. AAQ-26 FLIR	21		1,901
5. AC-130U P3I			3,319
6. AC-130H Weight Reduction			738
7. MC-130H Air Refueling			9,323
<b>TOTAL:</b>	<b>5,680</b>	<b>1,570</b>	<b>16,588</b>



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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / SF100			
B. Budget Acquisition History and Planning Information Performing Organizations													
Actual or Budget Value (\$ in thousands)													
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program		
Product Development Organizations Texas Instruments (AN/AAQ-17) TBD Contractor (AC-130U F3D) TBD Contractor (LPI Penals) Lockheed Martin (LLLTV) Lockheed (Weight Red) TBD Contractor (CTIL Air Refueling) Various	SS/FFP	Aug 95	8,426	8,426	6,525				1,901		8,426		
	TBD	TBD		TBD				997	3,319	Cont.	Cont.		
	SS/FP	Mar 96		TBD	6,561	1,875					9,236		
	SS/T&M	Apr 96		TBD		2,984	328		738		3,312		
	SS/TBD	Feb 97					200	110	9,323	Cont.	Cont.		
	C/TBD	Jan 99			3,601	21	1,042	1,289	1,307	Cont.	Cont.		
Support and Management Organizations Booz Allen Hamilton (LPI Penals)													
	C/CFPP	Jan 95			1,444	800					2,444		
Test and Evaluation Organizations													
Government Furnished Property													
Item Description	Contract Methd/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program		
Subtotal Product Development					16,687	4,880	1,570	2,396	16,588	Cont.	Cont.		
Subtotal Support and Management					1,444	800					2,444		
Subtotal Test and Evaluation													
Total Project					18,131	5,680	1,570	2,396	16,588	Cont.	Cont.		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997						
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S0417								
COST (In Millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S0417, Underwater Systems Advanced Development	29.861	21.796	24.229	2.318	5.227	12.446	10.323	5.752	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>This project funds the development of SEAL support items used during the conduct of hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other direct action missions. Sub-projects include:</p> <ul style="list-style-type: none"> <li>Advanced SEAL Delivery System (ASDS). The ASDS is a manned combatant submersible capable of delivering SOF personnel and weapons in a high threat environment. The ASDS will provide the requisite range, endurance, payload, and other capabilities for operation in the full range of threat environments.</li> <li>MK 8 Mod 1 SEAL Delivery Vehicle (SDV). This program upgrades and extends the service life of aging MK 8 Mod 0 SDVs; the MK 8s were built with 1960s technology. The new MK 8 Mod 1 SDV will incorporate more modern equipment to improve supportability / maintainability and will include upgrade of selected subsystems. The program was renamed MK 8 Mod 1 to more accurately reflect its nature as a Service Life Extension Program rather than a new, in-depth Research, Development, and Acquisition program.</li> <li>Undersea Systems. Development of undersea systems which provide the SOF combat swimmers with the necessary diving and diving related equipment to fulfill assigned underwater combat missions include the following: <ul style="list-style-type: none"> <li>Naval Special Warfare Mine Countermeasures (NSWMCM). Phased development/improvement of low magnetic and acoustic signature equipment to support the combat swimmer in the NSWMCM operational environment.</li> </ul> </li> </ul>										

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		FEBRUARY 1997
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S0417		
<ul style="list-style-type: none"> <li>Non-Gasoline Burning Outboard Engine (NBOE). Development of a submersible outboard engine, which does not use highly volatile gasoline, for use on SOF Combat Rubber Raiding Craft.</li> </ul>		
FY 1996 ACCOMPLISHMENTS:		
<ul style="list-style-type: none"> <li>(\$26,019K) Advanced SEAL Delivery System (ASDS). Completed all critical design reviews and resolved all major design issues. Production readiness review approved for hull and antenna/mast. Hull fabrication 75 percent complete. Initiated component testing. Continued fabrication and integration of the first ASDS and began system level testing. Began conversion of primary host platform to support system level testing. (1QTR96-4QTR96)</li> <li>(\$75K) Naval Special Warfare Mine Countermeasures (NSWCMCM). Continued development of integrated sensor navigation system and remote command detonation device. (2QTR96-3QTR96)</li> <li>(\$398K) Non-Gasoline Burning Outboard Engine (NBOE). Awarded contract for prototype engine. (2QTR96-4QTR96)</li> <li>(\$3,369K) Project Classified. Reported under separate cover.</li> </ul>		
FY 1997 PLAN:		
<ul style="list-style-type: none"> <li>(\$21,021K) ASDS. Close out all critical review design items. Conduct remainder of production readiness reviews. Continue component testing. Continue fabrication of prototype/first ASDS vehicles. Conduct training of Navy crews. Provide support equipment and fund model testing for the first SSN 688 Class host. Ship pressure vessel of first ASDS to prime contractor for integration. Continue subsystem testing of first ASDS. (1QTR97-4QTR97)</li> <li>(\$775K) NBOE. Continue development of prototype engine. Initiate early user assessment of prototype engine in the 3rd quarter (April, 1997) and accomplish Milestone II in 4th quarter. (1QTR97-4QTR97)</li> </ul>		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S0417
<p><b>FY 1998 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$22,429K) Advanced SEAL Delivery System (ASDS). Complete integration of prototype/first ASDS vehicle. Conduct final operational test &amp; evaluation of first ASDS, in shallow water. Perform simulated missions for training. Move test site to deep water for deep water testing and operational training with submarine host. Start construction of first follow-on vehicle (ASDS #2). (1QTR98-4QTR98)</li> <li>• (\$997K) Naval Special Warfare Mine Countermeasures (NSWMCM). Continue development of integrated sensor navigation system and remote command detonation device. (1QTR98-3QTR98)</li> <li>• (\$803K) Non-Gasoline Burning Outboard Engine. Complete developmental testing, operational testing, and accomplish Milestone III in the 4th quarter 1998. (1QTR98-4QTR98)</li> </ul> <p><b>FY 1999 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$330K) ASDS. Initiate pre-planned product improvements for a communications buoy, to enable communications while submerged. (1QTR99-4QTR99)</li> <li>• (\$993K) ASDS. Initiate pre-planned product improvement to develop nickel-cadmium batteries which could be used for training and shorter missions, to save future costs. (1QTR99-4QTR99)</li> <li>• (\$995K) NSWMCM. Continue development of integrated sensor navigation system and remote command detonation device. (1QTR99-3QTR99)</li> </ul>	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE																														
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		FEBRUARY 1997																														
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S0417																																
<p><b>ACQUISITION STRATEGY:</b></p> <ul style="list-style-type: none"> <li>Advanced SEAL Delivery System (ASDS). To select three qualified companies to develop independent preliminary designs. Following completion of the preliminary design efforts, a request for proposal for the engineering and manufacturing development (EMD) contract was released to these companies for proposal submittal for the design, fabrication, and test of the first ASDS. A single contractor was selected based on a best value source selection process. The selected contractor will also construct the production systems as phased pricing options in the ASDS EMD contract.</li> <li>MK 8 Mod 1 SEAL Delivery Vehicle (SDV). To develop a series of hardware modifications using a combination of off-the-shelf equipment and in-house Navy and contractor developed hardware, integrated by the SDV design agent.</li> </ul>																																
<p><b>B. Program Change Summary</b></p> <table border="1"> <thead> <tr> <th></th> <th>FY96</th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget</td> <td>30.863</td> <td>18.993</td> <td>11.921</td> <td>4.473</td> <td>Cont.</td> </tr> <tr> <td>Appropriated Value</td> <td>31.587</td> <td>21.793</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Appropriated Value / President's Budget</td> <td>(1.726)</td> <td>.003</td> <td>12.308</td> <td>(2.155)</td> <td></td> </tr> <tr> <td>Current Budget Submit</td> <td>29.861</td> <td>21.796</td> <td>24.229</td> <td>2.318</td> <td>Cont.</td> </tr> </tbody> </table>				FY96	FY97	FY98	FY99	Total Cost	Previous President's Budget	30.863	18.993	11.921	4.473	Cont.	Appropriated Value	31.587	21.793				Adjustments to Appropriated Value / President's Budget	(1.726)	.003	12.308	(2.155)		Current Budget Submit	29.861	21.796	24.229	2.318	Cont.
	FY96	FY97	FY98	FY99	Total Cost																											
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Current Budget Submit	29.861	21.796	24.229	2.318	Cont.																											
<p><b>Change Summary Explanation:</b></p> <p><b>Funding:</b> The FY 1996 decrease reflects revised OMB economic assumptions and realignment of funds to another acquisition program. FY 1997 and FY 1998 net increase and FY 1999 decrease reflects a restructuring of the Advanced SEAL Delivery System program and repricing of budgets to reflect the Administration's revised economic forecast.</p>																																

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)				DATE		FEBRUARY 1997					
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S0417									
Schedule:	None.										
Technical:	None.										
C. <u>Other Program Funding Summary</u>											
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
ASDS											
PROC, ASDS				38.800	38.378	46.402	54.362	50.717	5.079	Cont.	Cont.
PROC, ASDS Adv Buy			4.400	2.465	2.515	2.590	2.668				
MK 8 Mod 1 SDV		10.958	9.255	2.229	.603						34.837
PROC MK8 Mod 1 SDV											
NSWMCM											
PROC, Maritime Equip.						.894	2.087	6.070	10.977	Cont.	Cont.
MK 8 Mod 1 SDV											
PROC, Spares and Repair Parts		.924	1.725								2.660
NBOE											
PROC, Maritime Equip.				2.254	.707					Cont.	Cont.

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S0417																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
D. <u>Schedule Profile</u> Advanced SEAL Delivery System Complete Critical Design Reviews Start Testing First Unit Start Construction of 2nd ASDS Start Construction of 3rd ASDS Non-Gasoline Burning Outboard Engine Milestone II Milestone III NSW Mine Countermeasures Milestone I										FY96		FY97		FY98		FY99																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1140404BB Special Operations Tactical Systems Development / Project S0417		
	FY96	FY97	FY98
A. <u>Project Cost Breakdown</u> (\$ in thousands)			FY99
1. Advanced SEAL Delivery System			
Detailed Design / Manufacturing Development	25,319	20,343	21,739
Program Management Office Support	700	678	690
Pre-Planned Product Improvement			1,323
2. Other Undersea Systems			
Naval Special Warfare Mine Countermeasures Engineering and Manufacturing Dev.	75		997
Non-Gasoline Burning Outboard Engine Development	398	775	803
3. Project Classified	3,369		
<b>TOTAL:</b>	<u>29,861</u>	<u>21,796</u>	<u>24,229</u>
			<u>2,318</u>

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Exhibit R-3

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
R-1 ITEM NOMENCLATURE										PE 1160404BB Special Operations Tactical Systems Development / Project S0417	
APPROPRIATION / BUDGET ACTIVITY											
RDT&E, DEFENSEWIDE / 7											
B. Budget Acquisition History and Planning Information											
Performing Organizations											
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations ASDS, Westinghouse, MD ASDS, Newport News Shipbuilding, VA SDV, NSWC, Coastal Systems Station NSWMCM, TBD NBOE, CSS Project Classified	C/CPFF CPFF WR Various Various	Sep 94 Apr 95 Various Jan-May 95 Various			44,359 5,100 11,719 1,556 1,798	21,419 3,900 75 323 3,369	20,293	21,739	1,323		109,133 9,000 11,719 Cont. 1,391 5,167
Support and Management Organizations ASDS, NAVSEASYSOM (PMO) ASDS, PSI SDV, NAVSEASYSOM NSWMCM, NAVSEASYSOM NBOE, CSS	WR WR WR WR WR	Various Various Various Various Various			1,110 4,208 374 223	700	678	690		Cont.	Cont. 4,208 374 Cont. 435
Test and Evaluation Organizations ASDS, COMOPTEVFOR NBOE, CSS	WR	Jun 97					50	150			50 150
Government Furnished Property - None											
Subtotal Product Development					64,532	29,086	20,833	23,167	2,223	Cont.	Cont.
Subtotal Support and Mgmt					5,915	775	913	912	95	Cont.	Cont.
Subtotal Test and Evaluation							50	150			200
Total Project					70,447	29,861	21,796	24,229	2,318	Cont.	Cont.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3284									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
3284, SOF Aircraft Defensive Systems		10.744	6.413	8.155	5.464	20.115	17.434	11.383	10.015	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>Project provides definition, development, prototyping and testing of aircraft defensive avionics systems. The project will identify hardware and software enhancements for each Special Operations Forces (SOF) aircraft that will reduce detection, vulnerability, and threat engagement from threat radars thereby increasing the overall survivability of SOF assets. This project will identify and develop enhancements to each platform to meet the projected threat. Recommendations for equipment modification or replacement will be developed by each System Program Manager based upon the results of on-going engineering assessments and user operational requirements. This project is funding: dispenser upgrade and improvement programs, threat and missile warning receiver enhancements, radio frequency (RF) jammer improvements, and development of an infrared jamming system. Project also provides systems for SOF-unique portions of the Warner Robins-Air Logistics Center Electronic Warfare Avionics Integrated Systems Facility (EWAISF). The EWAISF directly supports software development and testing. The EWAISF effort is a type of Systems Integration Laboratory designed to support the incorporation of SOF aircraft defensive systems modifications into specific SOF platforms. Sub-projects include:</p> <ul style="list-style-type: none"> <li>• AAR-44 Missile Warning Receiver. A system improvement modification to the AAR-44 Passive Infrared Warning Receiver to enhance operational capability and reliability against surface-to-air missiles. Program corrects critical high false alarm rate and provides Directional Infrared Countermeasures interface.</li> <li>• ALQ-172 Electronic Countermeasures (AC-130U/MC-130H). A modification of the ALQ-172 radio frequency jammer that improves capability by adding low band jamming coverage for thirteen AC-130U Gunships and 24 MC-130H Combat Talon II aircraft.</li> </ul>											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3284		
<ul style="list-style-type: none"> <li>Directional Infrared Countermeasures (DIRCM). A joint international cooperative United Kingdom/United States project to develop a jammer for MC-130E/H and AC-130H/U aircraft capable of countering missile threats in the band one, two and four infrared frequency spectrum.</li> </ul>			
FY 1996 ACCOMPLISHMENTS:			
<ul style="list-style-type: none"> <li>(\$8,647K) Directional Infrared Countermeasures (DIRCM). Continued the cooperative UK/US development/production program. Completed Group A preliminary design review. Completed Group A and B critical design review. Complete qualification testing of prime mission equipment hardware. (1QTR96-3QTR97)</li> <li>(\$1,502K) ALQ-172 Electronic Countermeasures. Continued to test and support the ALQ-172 Radio Frequency Countermeasures Low-Band Jammer for eight AC-130H aircraft. (1QTR96-4QTR96)</li> <li>(\$595K) AAR-44 Missile Warning Receiver. Expanded scope of test program, both ground and flight, to certify extensive use of commercial parts in critical areas. (3QTR96-2QTR97)</li> </ul>			
FY 1997 PLAN:			
<ul style="list-style-type: none"> <li>(\$3,613K) DIRCM. Continue to support a cooperative UK/US development/production program for 59 SOF C-130 aircraft. (1QTR97-3QTR98)</li> <li>(\$2,800K) Electronic Warfare Avionics Integrated Systems Facility (EWAISF). Continue to support laboratory efforts to include update of the AAR-44 Integrated Support Station update. (1QTR97)</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3284		
<p><b>FY 1998 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$6,093K) Directional Infrared Countermeasures (DIRCM). Continue to support a cooperative UK/US development/production program for 59 SOC C-130 aircraft. (1QTR98-3QTR99)</li> <li>• (\$299K) ALQ-172 Electronic Countermeasures. Begin test and support of the ALQ-172 Low Band Jammer installation on thirteen AC-130U Gunships. (1QTR98-4QTR98)</li> <li>• (\$1,763K) Electronic Warfare Avionics Integrated Systems Facility (EWAISF). Continue to support laboratory efforts to include update of the Infrared Integrated Support Station. (1QTR98)</li> </ul> <p><b>FY 1999 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$2,136K) Directional Infrared Countermeasures (DIRCM). Continue to support a cooperative UK/US development/production program for 59 SOF C-130 aircraft. (1QTR99-3QTR00)</li> <li>• (\$1,493K) ALQ-172 Electronic Countermeasures. Continue test and support of the ALQ-172 Low Band Jammer installation on thirteen AC-130U Gunships. (1QTR99-4QTR99)</li> <li>• (\$1,835K) EWAISF. Continue to support laboratory efforts to include update of the ALQ-196 Integrated Support Station. (1QTR99)</li> </ul> <p><b>ACQUISITION STRATEGY:</b></p> <ul style="list-style-type: none"> <li>• DIRCM. The Memorandum of Agreement between the UK/US established the cooperative international DIRCM program.</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997			
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3284				
<p>The UK Ministry of Defence is the lead for the program. UK law applies to all acquisition actions. USSOCOM program manager is the US deputy to the UK Directional Infrared Countermeasures program manager.</p> <ul style="list-style-type: none"> <li>Electronic Warfare Avionics Integrated Systems Facility (EWAISF). Award sole source contracts to the manufacturer of the prime mission equipment required for hardware and hardware/software integration into the EWAISF.</li> </ul>						
<b>B. Program Change Summary</b>						
Previous President's Budget		FY96	FY97	FY98	FY99	Total Cost
Appropriated Value		12.109	6.567	7.879	3.990	Cont.
Adjustments to Appropriated Value / President's Budget		12.361	6.567			
Current Budget Submit		(1.617)	(.154)	.276	1.474	
Change Summary Explanation:		10.744	6.413	8.155	5.464	Cont.
<p><b>Funding:</b> FY 1996 decrease due to revised OMB economic assumptions and restructuring of the EWAISF and ALQ-172 programs. FY 1997 decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 adjustments reflect repricing of budgets to reflect the Administration's revised economic forecast and acceleration of the follow-on ALQ-172 mod on AC-130U and MC-130H aircraft.</p>						
<b>Schedule:</b>		None.				
<b>Technical:</b>		None.				

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)				DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3284								
C. <u>Other Program Funding Summary</u>										
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, C-130 Mods*	66.076	27.325	70.428	96.763	77.363	91.200	75.228	87.485	Cont.	Cont.
*Includes C-130 Modifications sub-line item funds for ALE-47 Chaff and Flare Dispenser, DIRCM, APR-46 Improvements, ALQ-172 Radio Frequency Countermeasures Jammer, Lifeline, AAR-44 Missile Warning Receiver, C-130 Infrared Suppressor, DIRCM P3I, and C-130 Electronic Warfare Data Bus.										
D. <u>Schedule Profile</u>										
Directional Infrared Countermeasures (DIRCM)										
CDR										
Start Formal Testing										
Production Decision										
Complete AC-130H QOT&E										
ALQ-172 Elec Countermeasures MS III										
AAR-44 Missile Warning Receiver MS III										

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project 3284		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u> <u>FY99</u>
1. AC-130H ALQ-172	1,502		
2. DIRCM			
Interface Control Document Development			946
Preliminary / Functional Design	3,623		2,713
Tests	2,698	1,436	1,000
ECPs	231	377	400
Program Management Office	2,095	1,800	1,980
3. EWAISF		2,800	1,763
4. ALQ-172 (AC-130U/MC-130H)			299
5. AAR-44 System Improvement Mod	595		1,835
			1,493
<b>TOTAL:</b>	<u>10,744</u>	<u>6,413</u>	<u>8,155</u> <u>5,464</u>

RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1996
R-1 ITEM NOMENCLATURE										PE 1160404BB Special Operations Tactical Systems Development / Project 3284	
B. Budget Acquisition History and Planning Information										Actual or Budget Value (\$ in thousands)	
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations Northrop (DIRCM) Georgia Tech (EWAISF) Amhurst (EWAISF) Cincinnati Electronics (AAR-44) TBD (ALQ-172 LBI) Various	C/FP	Mar 95	TBD	33,670	30,047	3,623		2,713	946		37,329
	SS/CPFF	Sep 94	2,490	2,490	2,490						2,490
	SS/FFP	Oct 96		Cont.	6,733	595	2,800	1,763	1,835	Cont.	Cont.
	SS/CPFF	Nov 94	7,328	7,328				299	1,493	Cont.	7,328
	TBD	Nov 97	TBD	TBD		407	377	400	100	Cont.	Cont.
Support and Management Organizations Booz Allen Hamilton (DIRCM) SSAI (ALQ-172) MTI (ALQ-172) ITC (ALQ-172)	Various	Various		Cont.	3,314						Cont.
	C/FP	Apr 93	TBD	14,407	5,842	2,095	1,800	1,980	690	2,000	14,407
	SS/CPFF	Jun 95	2,819	2,819	2,139	680					2,819
	SS/FFP	Jul 95	482	482	253	229					482
	SS/T&M	Sep 95	308	308	208	100					308
Test and Evaluation Organizations AFOTEC/Other (DIRCM) USAF Flight Test Facility (ALQ-172)	PO	Dec 95	TBD	6,534		2,698	1,436	1,000	400	1,000	6,534
	PO	Nov 95	3,817	3,817	3,817	317					4,134
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
ALQ-172 Group B provided by USAF											
Subtotal Product Development					42,584	4,625	3,177	5,175	4,374	Cont.	Cont.
Subtotal Support and Management					8,442	3,104	1,800	1,980	690	2,000	18,016
Subtotal Test and Evaluation					3,500	3,015	1,436	1,000	400	1,000	10,351
Total Project					54,526	10,744	6,413	8,155	5,464	Cont.	Cont.





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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE								
		FEBRUARY 1997								
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3326								
COST (In Millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
3326, AC-130U	4.282	14.495	6.009	1.164	1.386	1.375	.755	.759	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>The AC-130U aircraft will be more capable and survivable than the existing AC-130A/H aircraft. The aircraft subsystems will include precision navigation, target acquisition and strike radar, fire control computers integrated on redundant MIL-STD-1553B data buses, electronic countermeasures, infrared countermeasures, aerial refueling, covert lighting, trainable weapons, all light level television, infrared sensor, and secure communications systems. These subsystems will enable the gunship to strike targets with surgical accuracy, to loiter safely in the target area for extended time periods, and to perform these tasks in night or adverse weather conditions. Every effort has been made to adapt off-the-shelf equipment. To the maximum extent possible, the subsystems in the AC-130U will be common with systems on other Air Force Special Operations Command aircraft. AC-130U software will be fixed and/or enhanced using a Systems Integration Laboratory (SIL).</p> <p>FY 1996 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>• (\$531K) Continued development of SIL. (4QTR96)</li> <li>• (\$991K) Radar software development facility support. (2QTR96)</li> <li>• (\$100K) Continued effort on technical order verification and validation. (2QTR96)</li> <li>• (\$745K) Continued government software and All Light Level TV sensor flight test and support. (2QTR96-3QTR96)</li> </ul>										

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3326
<ul style="list-style-type: none"> <li>• (\$1,915K) Continued mission support including contractor advisory and assistance services and travel. (1QTR96-3QTR96)</li> </ul> <p>FY 1997 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$7,258K) Perform engineering analysis and identify corrections for service reports. (1QTR97)</li> <li>• (\$1,260K) Continue Systems Integration Laboratory development. (1QTR97)</li> <li>• (\$4,150K) Develop depot-level fixtures and holding tools for delivery to Warner Robins Air Logistics Center. (3QTR97)</li> <li>• (\$641K) Continue mission support and contractor advisory services. (1QTR97-4QTR97)</li> <li>• (\$166K) Continue effort on technical order verification and validation. (1QTR97)</li> <li>• (\$550K) Continue radar software development facility support. (1QTR97-4QTR97)</li> <li>• (\$470K) Continue sensor flight test operations and support. (2QTR97-3QTR97)</li> </ul> <p>FY 1998 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$233K) Continue effort on technical order verification/validation and printing. (1QTR98)</li> <li>• (\$4,580K) Develop I-level support equipment for the trainable gunmount system and the 25mm gun. (2QTR98)</li> <li>• (\$418K) Conduct annual software flight test operations and support. (2QTR98-3QTR98)</li> </ul>	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project 3326	
<ul style="list-style-type: none"> <li>• (\$570K) Continue reliability and maintainability technical studies and analysis. Examine alternative solutions for control and display problems. (3QTR98)</li> <li>• (\$208K) Continue mission support. (1QTR98-4QTR98)</li> </ul> <p>FY 1999 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$170K) Continue effort on technical order verification/validation and printing. (2QTR99)</li> <li>• (\$395K) Continue annual software flight test operations and support. (2QTR99-3QTR99)</li> <li>• (\$591K) Continue reliability and maintainability technical studies and analysis. Continue control and display analysis. (2QTR99)</li> <li>• (\$8K) Continue mission support (system safety support). (1QTR99)</li> </ul> <p>ACQUISITION STRATEGY: Modify C-130H airframe into a side-firing configuration on a sole-source fixed price incentive development contract. Conduct a combined Qualification Test and Evaluation/Qualification Operational Test and Evaluation(QOT&amp;E) and a dedicated QOT&amp;E. The AC-130U will be logistically supported at organizational, intermediate and depot levels via interim contractor support until organic support is established. Initial operational capability March 1996, full operational capability in FY 2001.</p>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 116040BB Special Operations Tactical Systems Development / Project 3326			
<u>B. Program Change Summary</u>		FY96	FY97	FY98
Previous President's Budget		6.124	14.563	1.668
Appropriated Value		6.252	14.563	6.327
Adjustments to Appropriated Value / President's Budget		(1.970)	(.068)	(.318)
Current Budget Submit		4.282	14.495	6.009
				1.164
				Cont.
Change Summary Explanation:				
Funding:	FY 1996 decrease due to revised OMB economic assumptions. FY 1997 decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast.			
Schedule:	None.			
Technical:	None.			

## RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE \_\_\_\_\_

FEBRUARY 1997

**APPROPRIATION / BUDGET ACTIVITY**

RDT&amp;E, DEFENSEWIDE / 7

R-1 ITEM NOMENCLATURE / PROJECT NO.

PE 1160404BB Special Operations Tactical Systems Development / Project 3326

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, C-130 Mods	10.651	1.030	0	6.665	8.000	16.670	18.933	27.738	Cont.	Cont.
PROC, AC-130U	64.610	44.800	55.105	29.643	27.726	22.597	3.443	1.860	Cont.	Cont.

**Full Operational Capability: Mar 2001**

FY99

FY97

FY96

1

X

X

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**Exhibit R-2**

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project 3326			
A. Project Cost Breakdown (\$ in thousands)		FY96	FY97	FY98	FY99
1. Other Gov't Test (TOV&V)		100	166	233	170
2. SIL S/W		531	1,260		
3. Depot-level fixtures and holding tools			4,150		
4. Technical Studies / Analyses		991		570	591
5. Development of Service Reports			7,258		
6. Sensor test and support		745	470		
7. Mission support and contractor advisory services		1,915	641	208	8
8. Intermediate-level support equipment				4,580	
9. Flight test and support				418	395
10. Radar software development facility support			550		
TOTAL:		4,282	14,495	6,009	1,164

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Exhibit R-3

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)						DATE		FEBRUARY 1997			
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7			R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project 3326								
B. Budget Acquisition History and Planning Information Performing Organizations											
Actual or Budget Value (\$ in thousands)											
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations											
Rockwell NAA	C/FFIF	Jul 87	194,589	194,589	194,589						194,589
Rockwell FR Test	SS/FFIF	Various		16,941	16,941						16,941
Rockwell ECPs	SS/CPFF	Various		39,564	14,266	2,267	13,218	5,150	591	4,072	39,564
Loral (IBM)	SS/FFIF	Various		4,777	4,777						4,777
General Electric	SS/FFP	Various		1,436	1,436						1,436
TBD (ECOs)	TBD	Various		135	135						135
LASC	SS/FFP	Oct 94		955	955						955
Rockwell (T-1 Training)	SS/FFP	Nov 89		616	616						616
Miscellaneous	Various	Various		3,798	3,798						3,798
Support and Management Organizations											
Air Force, AFMC ASC/LJ	Various			32,240	20,927	1,915	641	208	8	8,541	32,240
Test and Evaluation Organizations											
AFPTC	PO	Various		35,251	33,968		470	418	395		35,251
ITT	SS/FFP	Jan 93		835	835						835
Other Gov't Test (TOVV)	PO	Oct/ea. FY		1,615	946	100	166	233	170		1,615
RADC Testing	PO	Various		748	748						748
WRDC Testing	PO	Various		224	224						224



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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7				R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project 3326									
Government Furnished Property													
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program			
Product Development Property Lockheed Airframe Allison Engines Various Avionics Various Other	SS/FFP SS/FFP MIPR MIPR			13,398 2,196 2,868 413						13,398 2,196 2,868 413			
Support and Management Property None													
Test and Evaluation Property Flight Test Support Equipment Other Gov't Test (TOVV) Milstrip				1,672 66						1,672 66			
Subtotal Product Development				256,388	2,267	13,218	5,150	591	4,072	281,656			
Subtotal Support and Management				20,927	1,915	641	208	8	8,541	32,240			
Subtotal Test and Evaluation				38,459	100	636	651	565		38,673			
Total Project				315,774	4,282	14,495	6,009	1,164	12,583	352,569			

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Exhibit R-3

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE										FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S350											
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost		
S350, Special Operations Forces Planning and Rehearsal System (SOPFARS)		7.997	7.339	5.640	4.072	3.801	3.535	3.275	3.024	Cont.	Cont.		

A. Mission Description and Budget Item Justification

SOPFARS is a joint acquisition program for the United States Special Operations Command. This program is developing an automated mission planning capability to support Special Operations Forces (SOF). SOPFARS will consist of the SOF version of the Air Force Mission Support System and the SOF Portable Computer Flight Planning System. SOPFARS will be provided to Air Force Special Operations Command units and the aviation component of the United States Army Special Operations Command - the 160th Special Operations Aviation Regiment. SOPFARS will automate mission planning thus allowing SOF commanders and crews to plan and respond quickly to missions of national importance as well as day-to-day tasks. To accomplish this task, SOPFARS will provide a multi-command level planning capability at major SOF headquarters, theater headquarters, SOF Forward Operating Bases and Forward Operating Locations. SOPFARS will also provide portable subsystems and mission execution support products for use by crews deployed to operational locations. Present aviation mission planning capabilities cannot adequately support the stated mission need. Existing systems are insufficient for planning SOF operations. Specifically, existing systems lack sufficient processing speed and flexibility, storage capacity, growth potential, graphics (both on-screen and hard copy output), image processing and storage, and the ability to process combat planning folder data in a timely manner. They also lack near-real-time access to national/tactical level data bases and the capability to update data in a timely fashion, along with the means to effectively process the data during mission planning. The mobility, complexity, quantity, and lethality of enemy threats dictate automated data input and systems that can be interfaced via electronic communication systems throughout the SOF community. The SOPFARS effort meets the joint requirement to ensure interoperability and standardization of the mission planning process between SOF and the Services. Develops Aircraft / Weapons / Electronics modules for MH-60G/K/L, MH-47E/D, MH-53J, MC-130E/H, AC-130H/U, A/H-6, HC-130P/N, and CV-22.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S350		
FY 1996 ACCOMPLISHMENTS:			
<ul style="list-style-type: none"><li>• (\$720K) Continued Air Force Mission Support System (AFMSS) Aircraft/Weapons/Electronics (A/W/E) interface software module development for all SOF aircraft. (2QTR96-4QTR96)</li><li>• (\$1,500K) Continued block C2.0 and C2.0+ (now C2.1) software development. Started development of AFMSS C2.2 software. (2QTR96-1QTR97)</li><li>• (\$2,555K) Continued Common Mapping production system development, develop AFMSS interfaces and Portable Computer (PC) Flight Planning System (PFPS) interfaces. (2QTR96-4QTR96)</li><li>• (\$3,222K) Began software module enhancements to the PC PFPS to integrate and extend SOF A/W/E software modules to include interface with the AFMSS component of SOFPARS. (2QTR96-4QTR96)</li></ul>			
FY 1997 PLAN:			
<ul style="list-style-type: none"><li>• (\$1,930K) Continue AFMSS C2.2 software development. (1QTR97-4QTR97)</li><li>• (\$1,500K) Continue developing AFMSS interfaces and the PC PFPS interfaces. (1QTR97-4QTR97)</li><li>• (\$3,909K) Continue PC PFPS enhancements to include aircraft/weapons/electronics interface software module development for all SOF aircraft. (1QTR97-4QTR97)</li></ul>			

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S350		
<p><b>FY 1998 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$1,057K) Begin AFMSS C3.0 development (SOF unique features). (1QTR98-4QTR98)</li> <li>• (\$2,233K) Continue PC based development and integration with AFMSS C3.0 software architecture. (1QTR98-4QTR98)</li> <li>• (\$2,350K) Continue aircraft weapons/electronics interface software module development. (1QTR98-4QTR98)</li> </ul> <p><b>FY 1999 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$1,055K) Complete AFMSS C3.0 development (SOF unique features). (1QTR99-4QTR99)</li> <li>• (\$1,767K) Continues PC based development and integration with AFMSS C3.0 software architecture. (1QTR99-4QTR99)</li> <li>• (\$1,250K) Continue aircraft weapons/electronics interface software module development. (1QTR99-4QTR99)</li> </ul> <p><b>ACQUISITION STRATEGY:</b></p> <p>Develop mission planning software to support SOF operations leveraging ongoing efforts with common PC PFPs and AFMSS requirements. Integration of PC PFPs and AFMSS to support SOF requirements maximizes use of commercial off-the-shelf software technology and components to reduce overall costs and schedule. Contract strategy combines various contracts and types to include competitively awarded cost plus and sole source cost no fee (educational institution) contracts. Maximize use of existing hardware technology procured via firm fixed price contract to take advantage of software portability and open system architecture. Focuses on aircraft / weapons / electronics interface required to initialize and upload aircraft avionics through the use of electronic data transfer devices. Uses software support facility to maintain and update software.</p>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S350				
B. <u>Program Change Summary</u>		FY96	FY97	FY98	FY99	Total Cost
Previous President's Budget		9.456	7.439	5.656	4.092	Cont.
Appropriated Value		9.653	7.439			
Adjustments to Appropriated Value / President's Budget		(1.656)	(.100)	(.016)	(.020)	
Current Budget Submit		7.997	7.339	5.640	4.072	Cont.
Change Summary Explanation:						
Funding:		FY 1996 decrease is for Congressional inflation adjustments, overhead/management savings, and realignment to fund higher priority MFP-11 requirements. FY 1997 decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast.				
Schedule:		Software blocks are defined by funding and time. Cost overruns have caused blocks C2.0 to be restructured into C2.0, C2.0+ (now C2.1), C2.2, and Air Force Mission Support System C3.0 and have been deferred accordingly.				
Technical:		Mission Planning technical architecture has been expanded to include integration of requirements into the Portable Computer Flight Planning System and the Air Force Mission Support System. Expansion is to take best advantage of existing mission planning software and hardware and commercial off-the-shelf software to reduce overall cost and schedule.				

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)				DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S350								
<u>C. Other Program Funding Summary</u>										
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, SOFPARS	1.086	1.876	.568	1.128	2.516	2.680	2.077	.998	Cont.	Cont.
<u>D. Schedule Profile</u>										
Block C2.0 FCA/PCA										
Block C2.0+(now C2.1) FCA/PCA										
AFMSS 3.0 Development Contract Award										
Block C2.2 Award										
Block C2.2 FCA/PCA										
PFPS Release 2.0										
PFPS Release 3.0										
PFPS Release 4.0										

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S350		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>
1. Air Force Mission Support System Mission Planning Core	1,500	1,930	1,057
2. Aircraft, Weapons, Electronics Interfaces and SOP Common Module/Interfaces	6,497	5,409	4,583
<b>TOTAL:</b>	<u>7,997</u>	<u>7,339</u>	<u>5,640</u>
			<u>4,072</u>

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Exhibit R-3

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S350	
B. <u>Budget Acquisition History and Planning Information</u> Performing Organizations										Actual or Budget Value (\$ in thousands)	
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations Various	Various	Various		Cont.	22,151	5,326	5,375	4,385	3,336	Cont.	Cont.
Support and Management Organizations Various	Various	Various		Cont.	5,709	2,671	1,964	752	486	Cont.	Cont.
Test and Evaluation Organizations	TBD	TBD		Cont.				503	250	Cont.	Cont.
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Subtotal Product Development					22,151	5,326	5,375	4,385	3,336	Cont.	Cont.
Subtotal Support and Management					5,709	2,671	1,964	752	486	Cont.	Cont.
Subtotal Test and Evaluation								503	250		
Total Project					27,860	7,997	7,339	5,640	4,072	Cont.	Cont.





RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S375									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S375, Weapons and Support Systems Advanced Development		.147	3.801	4.109	2.548	4.100	2.525	.463	.276	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>Special Operations Forces (SOF) often deploy as small, independent, quick reaction, foot-mobile teams independent of primary logistics support. Existing weapons and fire control are frequently too heavy to use under these conditions. This project provides for development and testing of specialized, lightweight individual weapons, fire control/surveillance devices, and combat equipment to meet the unique requirements of SOF. This is a continuing program. Sub-projects include:</p> <ul style="list-style-type: none"> <li>● Heavy Sniper Rifle (HSR). HSR provides SOF with a standoff engagement capability against various materiel targets such as parked aircraft, C3I sites, radar equipment, ammunition storage facilities, fuel storage facilities, and light armored vehicles. Allows SOF operators to engage materiel targets at long range before enemy security forces can react.</li> <li>● Improved Night/Day Observation/Fire Control Device (INOD). Allows the SOF sniper to detect, acquire, and engage targets out to his weapon's maximum effective range under day and night conditions. INOD is intended for use on the M24 sniper rifle (small device) and the .50 caliber heavy sniper rifle (large device).</li> <li>● M4A1 Carbine SOF Accessories Kit. SOF variant of standard Army M4 Carbine. Allows mounting of optional accessories (up to 30 different functions/capabilities) such as day scopes, night scopes, active aiming laser module, visible lights, grenade launchers, suppressors, and hand grips.</li> <li>● SOF Personal Equipment Advanced Requirements, formerly called battle dress system. Integrates the development and</li> </ul>											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S375		
<p>procurement of everything the SOF operator wears, carries, and consumes. It treats the individual SOF operator as a system, and acquires SOF-unique, state of the art equipment in nine functional areas (clothing, body armor/load bearing equipment, ballistic protection, optical protection, nuclear biological chemical protection, signature reduction, physiological management, target acquisition, command control communications computers and information).</p>			
FY 1996 ACCOMPLISHMENTS:			
<ul style="list-style-type: none"> <li>• (\$147K) SOF Personal Equipment Advanced Requirements (SPEAR). Initiated load bearing and body armor technology studies to identify materials and fabrics which provide measurable improvement over existing load-bearing and body armor systems. (2QTR96-4QTR96)</li> </ul>			
FY 1997 PLAN:			
<ul style="list-style-type: none"> <li>• (\$730K) SPEAR. Develop and test Body Armor / Load Bearing Equipment prototypes. Initiate Modular Integrated Communications Helmet. (1QTR97-3QTR97)</li> <li>• (\$44K) M4A1 Carbine SOF Accessories Kit. Evaluate integration of night scopes with active laser aiming module and/or reflex sight. (3QTR97)</li> <li>• (\$2,737K) Improved Night/Day Observation/Fire Control Device (INOD). Complete front end analysis of feasible technologies. Award contract for development and test of early prototypes. (1QTR97-3QTR97)</li> <li>• (\$290K) Heavy Sniper Rifle. Conduct shoot-off and downselect of NDI vendor samples. Initiate design verification testing of selected weapon. (2QTR97-4QTR97)</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S375	
<p><b>FY 1998 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$2,392K) Improved Night/Day Observation/Fire Control Device (INOD). Complete evaluation of early prototypes. Initiate fabrication and evaluation of pre-production prototypes. (2QTR98)</li> <li>• (\$1,717K) SOF Personal Equipment Advanced Requirements (SPEAR). Complete evaluation of integrated helmet. Perform evaluation of nuclear, biological and chemical protection and optical protection modules. (1QTR98-3QTR98)</li> </ul> <p><b>FY 1999 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$796K) INOD. Complete evaluation of pre-production prototypes. (2QTR99)</li> <li>• (\$1,752K) SPEAR. Complete evaluation of NBC protection and optical protection modules. Initiate development of signature reduction module. (1QTR99-3QTR99)</li> </ul> <p><b>ACQUISITION STRATEGY:</b></p> <ul style="list-style-type: none"> <li>• INOD. The INOD follows a streamlined acquisition strategy calling for a cost plus development contract award to a single contractor following full and open competition solicitation. The solicitation will be based upon performance specifications flowing from the system's operational requirements document. Production options will be tied to the development contact, incentivizing the contractor to meet or exceed the critical parameters of the performance specification. The system will be required to undergo a combined developmental / operational test prior to a production decision.</li> <li>• SPEAR. Body Armor/Load Bearing Equipment and Modular Integrated Communications Helmet follow the same acquisition strategy as INOD.</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S375		
<b>B. Program Change Summary</b>			
Previous President's Budget		FY96	FY97
Appropriated Value		.150	1.986
Adjustments to Appropriated Value / President's Budget		.199	3.886
Current Budget Submit		(.052)	(.085)
		.147	3.801
			4.109
			2.548
			Cont.
			Cont.
<p><b>Change Summary Explanation:</b></p> <p><b>Funding:</b> FY 1996 decrease was for Congressional inflation adjustment, overhead/management savings, and to fund higher priority MFP-11 requirements. FY 1997 net decrease reflects project cost share for the Small Business Innovative Research Program, Congressional adjustment to Defense-wide investment appropriations, and realignments to fund higher priority MFP-11 requirements. FY 1998 and FY 1999 increases reflect realignments to fund higher priority MFP-11 requirements and repricing of budgets to reflect the Administration's revised economic forecast.</p> <p><b>Schedule:</b> None.</p> <p><b>Technical:</b> None.</p>			

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997											
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S375												
<u>C. Other Program Funding Summary</u>														
PROC, SOF Small Arms & Spt. Equip.	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost				
	11.252	10.613	10.269	18.577	14.649	12.694	10.259	8.742	Cont.	Cont.				
<u>D. Schedule Profile</u>														
SPEAR														
Initiate Studies( BA/LBE)														
MS I/II BA/LBE														
MS III BA/LBE														
M4A1 Carbine SOF Accessories Kit														
MS III on Reflex Scope	x													
MS III Balance of Accessories (less night scope)	x													
Night Scope MS III														
Night Scope Contract Award														
INOD														
MS I/II														
MS III														
MSR														
MS III														

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S375		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	FY96	FY97	FY98
1. M4A1 Carbine SOF Accessories Kits		44	
2. SOF Personal Equipment Advanced Requirements	147	730	1,717
3. Improved Night/Day Observation/Fire Control Device		2,737	2,392
4. Heavy Sniper Rifle		290	796
<b>TOTAL:</b>	<u>147</u>	<u>3,801</u>	<u>4,109</u>
			<u>2,548</u>

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S375	
B. Budget Acquisition History and Planning Information Performing Organizations										Actual or Budget Value (\$ in thousands)	
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations Naval Surface Warfare Center-Crane Soldier Systems Command, USA PM-Night Vision Electro-Optics, USA PM-Small Arms, USA	ALLOT C/CPFF MIPR MIPR	Sep 96,97 Mar 96 Var Var	NA NA NA NA	NA NA NA NA	5,133	147	44 730 2,737 290	1,717 2,392	1,752 796	1,415 Cont.	6,592 Cont. 5,925 290
Support and Management Organizations											
Test and Evaluation Organizations											
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Subtotal Product Development					5,133	147	3,801	4,109	2,548	Cont.	Cont.
Subtotal Support and Management											
Subtotal Test and Evaluation											
Total Project					5,133	147	3,801	4,109	2,548	Cont.	Cont.





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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project \$625									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S625, SOF Training Systems		4.441	9.759	9.564	24.777	11.359	12.907	29.197	1.933	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>This project funds analysis, development, test, and integration of SOF aviation-related training and mission rehearsal systems and upgrades. Sub-projects include: AC-130U Gunship Aircrew / Maintenance Training System (GA/MTS). The GA/MTS develops an integrated, ground-based combination training and mission rehearsal system to support initial, mission, special qualification, continuation, upgrade and maintenance training for the AC-130U Gunship aircrews. The need for GA/MTS is driven by the lack of any current training or mission rehearsal capability for the aircrew and maintenance personnel. The GA/MTS will consist of two primary components. The first component, a Battle Management Center (BMC) testbed, will refine requirements for system fidelity and provide an initial operational capability training capability for the Navigator Fire Control Officer (NAV/FCO) crew stations. The second component will complete the BMC with sensor operator and electronic warfare crew stations and build a flight deck with full fidelity, six (6) degree of freedom motion simulation for the pilots and flight engineers. Additionally, the Instructor Operator Station will provide role-playing capabilities for the sensor operators. GA/MTS will be networked with other AFSOC mission rehearsal devices.</p> <p><b>FY 1996 ACCOMPLISHMENTS:</b></p> <ul style="list-style-type: none"> <li>• (\$3,981K) AC-130U Gunship Aircrew / Maintenance Training System (GA/MTS). Began development of Battle Management Center (BMC) testbed to refine user requirements for navigator and fire control officer workstations. (2QTR96-4QTR96)</li> <li>• (\$460K) Supported Program Management Office. (2QTR96)</li> </ul>											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S625		
FY 1997 PLAN:			
•	(\$8,769K) AC-130U Gunship Aircrew / Maintenance Training System (GA/MTS). Continue development of the BMC testbed. (1QTR96-1QTR97)		
•	(\$990K) Program Management Office support. (1QTR97-4QTR97)		
FY 1998 PLAN:			
•	(\$2,080K) GA/MTS. Complete development of the BMC testbed. (1QTR98)		
•	(\$6,694K) GA/MTS. Begin development of the flight deck and remaining crew stations. (3QTR98)		
•	(\$790K) Program Management Office support. (1QTR98-2QTR98)		
FY 1999 PLAN:			
•	(\$23,677K) GA/MTS. Continue development of flight deck and remaining crew stations. (1QTR99-2QTR99)		
•	(\$1,100K) Program Management Office support. (1QTR99-2QTR99)		
ACQUISITION STRATEGY: GA/MTS program is currently in Phase I. The two-phase acquisition strategy will first build a BMC testbed using production AC-130U avionics, commercial image generation, and computers to refine user requirements prior to the second phase to procure a complete BMC and Flight Deck Aircrew Training Device (ATD). A Milestone II/III decision is planned for 4QFY97 to support a 3QFY98 contract award for the ATD.			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S625									
<b>B. <u>Program Change Summary</u></b>											
Previous President's Budget		FY96	FY97	FY98	FY99	Total Cost					
		2.437	9.759	11.985	8.103	Cont.					
Appropriated Value		2.488	9.759								
Adjustments to Appropriated Value / President's Budget		1.953		(2.421)	16.674						
Current Budget Submit		4.441	9.759	9.564	24.777	Cont.					
Change Summary Explanation:											
Funding:		FY 1996 and FY 1999 increases are to accelerate the high priority acquisition of AC-130U aircrew training devices. FY 1998 reduction is required to fund other high priority MFP-11 programs.									
Schedule:		AC-130H Part Task Trainer development start will be delayed until FY 2001.									
Technical:		AC-130H Part Task Trainer development start will be delayed until FY 2001.									
<b>C. <u>Other Program Funding Summary</u></b>											
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, SOF Training Systems		19.496	3.874	3.352	2.667	.071	2.438	.116	32.417	Cont.	Cont.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)										DATE		FEBRUARY 1997															
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7										R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S625																	
D. <u>Schedule Profile</u>										FY96		FY97		FY98		FY99											
										1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Begin prototyping of Battle Management Center										x																	
GA/MTS Milestone II/III														x													
GA/MTS BMC IOC																x											
GA/MTS Flight Deck Contract Award																x											

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S625		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>
1. AC-130U Battle Management Center (BMC) Testbed	3,981	8,769	2,080
2. Mission Support	460	990	1,100
3. AC-130U Aircrew/Maintenance Training Device			23,677
<b>TOTAL:</b>	<u>4,441</u>	<u>9,759</u>	<u>24,777</u>

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7					R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S625								
B. Budget Acquisition History and Planning Information													
Performing Organizations													
Actual or Budget Value (\$ in thousands)													
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program		
Product Development Organizations STRICOM (GAMTS)	SS/CPAF	Mar 96				3,981	8,769	8,774	23,677	Cont.	Cont. 2,694		
Support and Management Organizations STRICOM						460	990	790	1,100	Cont.	Cont.		
Test and Evaluation Organizations													
Government Furnished Property													
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program		
Subtotal Product Development						3,981	8,769	8,774	23,677	Cont.	Cont.		
Subtotal Support and Management						460	990	790	1,100	Cont.	Cont.		
Subtotal Test and Evaluation													
Total Project						4,441	9,759	9,564	24,777	Cont.	Cont.		

Exhibit R-3

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE										FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE / PROJECT NO.										Total Cost	
RDT&E, DEFENSEWIDE / 7		PE 1160404BB Special Operations Tactical Systems Development / Project S700										Cost to Complete	
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost		
S700, Communications Advanced Development		.730	2.604	2.130	2.890	2.601	2.212	2.077	2.205	Cont.	Cont.		

A. Mission Description and Budget Item Justification

This project provides for development and testing of selected items of specialized equipment to meet the unique requirements of Special Operations Forces (SOF). Specialized equipment will permit small, highly trained forces to conduct required operations across the entire spectrum of conflict. These operations are generally conducted in harsh environments, for unspecified periods, and in locations requiring small unit autonomy. Special Operations Forces must infiltrate by land, sea, and air to conduct unconventional warfare, direct actions, or deep reconnaissance operations in denied areas against insurgent units, terrorists, or highly sophisticated threat forces. The requirement to operate in denied areas controlled by a sophisticated threat mandates that SOF systems remain technologically superior to threat forces to ensure mission success.

USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities into the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture will employ the latest standards and technology by transitioning from separate systems to full integration with the infosphere. The infosphere is a multitude of existing and projected national assets that operate with any force combination in multiple environments. The C4I programs funded in this project are grouped by the level of organizational element they support: Operational Element (Team), Above Operational Element (Deployed), and Above Operational Element (Garrison). Sub-projects include:



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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700	
OPERATIONAL ELEMENT (TEAM)		
<ul style="list-style-type: none"><li>• Aircraft Wireless Intercom System (AWIS). AWIS allows reliable communications between Special Operations aircraft crew members, both external and internal to the aircraft. Eliminates the need for a physical hardware connection between the crew member and the aircraft increasing safety. Aircraft Wireless Intercom System is self-contained, portable, lightweight, and easily interchangeable between various Special Operations aircraft.</li><li>• Multi-Band Inter/Intra Team Radio (MBITR). MBITR will provide lightweight, handheld, inter/intra team communications for Joint SOF. SOF teams conduct air, ground, and maritime missions across the entire operational spectrum. These missions currently require SOF teams carry multiple handheld radios operating in several different frequency bands to ensure positive communications. The MBITR will provide each of these frequency bands in a single handheld radio with embedded communications security (COMSEC).</li><li>• Multiband/Multimission Radio (MBMMR). A joint SOF requirement, MBMMR provides a lightweight, secure, manpackable transceiver operating in the following frequency bands: VHF-FM, VHF-AM, UHF-AM, and UHF-FM satellite communications in a single radio, reducing the number of radios carried by each team.</li><li>• Special Operations Communications Assemblage (SOCA) Improvement. Program upgrades 80 SOCA units delivered to SOF units in FY93 and prior. Proposed modifications include repackaging/downsizing (no more than 70lbs. less generator), enhanced graphics, UHF SATCOM DAMA capability, advanced data controllers, and document upgrades to enhance interoperability with conventional and other SOF units. The acquisition strategy is to develop and test the proposed improvements (Phase II) prior to system upgrade (Phase III).</li><li>• Special Mission Radio System (SMRS). SMRS is a joint radio system that provides SOF a lightweight, Low Probability of Intercept/Low Probability of Detection (LPI/LPD) high frequency radio with co-resident military standard Automatic Link Establishment (ALE), non-standard ALE, and internal communication security capabilities. Deployed in hostile and</li></ul>		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	
<p>clandestine environments, the system consists of manpack radio and base station, and provides hardware improvements and software documentation.</p> <p>ABOVE OPERATIONAL ELEMENT (DEPLOYED)</p> <ul style="list-style-type: none"> <li>• Special Mission Radio System (SMRS). SMRS is also planned for use at this level.</li> <li>• Joint Base Station (JBS). JBS is an evolutionary acquisition program which encompasses five service-specific requirements: TSC-135 (core capability, commercial vehicle system), TSC-135 (V)1 (military vehicle system with transit case capabilities), TSC-135 (V)2 (transit case system), TSC-135 (V)3 (fixed site system), and TSC-135 (V)4 (modular communications system). JBS will provide SOF with continuous, reliable, communications among SOF component commands while allowing for differences in missions. JBS will contain line-of-sight (LOS) and beyond-LOS radios, and associated message handling and switching equipment, providing command and control voice, imagery, data, and facsimile.</li> <li>• SOF Tactical Assured Connectivity Systems (SOFTACS) (formerly called Tactical C4I Mod). SOFTACS is an integrated suite of communications systems designed to support the high-capacity, digital, secure, interoperable, transmission and switching requirements of USSOCOM C4I architecture.</li> </ul> <p>ABOVE OPERATIONAL ELEMENT (GARRISON)</p> <ul style="list-style-type: none"> <li>• SMRS. SMRS is also planned for use at this level.</li> <li>• Command, Control, Communications, Computers and Intelligence Automation System (C4IAS). Beginning in FY 1998, C4IAS consolidates and migrates SOF C4I automation systems to a Joint C4I Automation System that will provide a seamless, interoperable and easy to use automation environment for the headquarters USSOCOM, component commands, and the theater SOC users to support SOF worldwide. It will provide accurate and timely information, analysis and planning tools. The</li> </ul>	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700	
<p>Joint SOF C4I Automation System will fulfill a wide range of requirements ranging from command and control, office automation to decision-making assistance, mission analysis, as well as planning and execution support. The implementation of state-of-art hardware, software and communications technology will provide the SOF user community with the best, most efficient means to effectively satisfy SOF information and planning needs. Migration objectives include compliance with Defense Information Infrastructure (DII) Common Operating Environment (COE), collaterization, upgraded network communications backbone, tactical extensions and national systems. Legacy systems include USSOCOM LAN/WAN, NAVSPECWARCOM LAN, AFSOC LAN, Special Tactics Network (STN), Army Special Operations Command Network (ASOCNET), SOF Logistics and Acquisition Management System (SLAMS), Command Planning Database (CPD), Special Mission Unit (SMU) network, and Defense Simulation Internet (DSI). The acquisition strategy is to use existing government contracts to obtain required software and hardware upgrades through a structured evolutionary technology insertion process.</p> <p><b>FY 1996 ACCOMPLISHMENTS:</b></p> <ul style="list-style-type: none"> <li>• (\$20K) Aircraft Wireless Intercom System (AWIS). Performed first Article Testing. (4QTR96)</li> <li>• (\$327K) Multi-Band Inter/Intra Team Radio (MBITR). Provided program management support and began solicitation process for development contract. (3QTR96-1QTR97)</li> <li>• (\$49K) Multiband/Multimission Radio (MBMMR). Conducted Milestone 0 review. Conducted market research. (4QTR96)</li> <li>• (\$334K) Joint Base Station. Performed system engineering, development, integration, and testing for technology insertion of Non-Developmental Item/Commercial Off-the-Shelf/Government Off-the-Shelf equipment. (1QTR96-4QTR96)</li> </ul> <p><b>FY 1997 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$15K) AWIS. Follow-on testing support. (1QTR96-4QTR96)</li> </ul>		

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700		
<ul style="list-style-type: none"><li>• (\$377K) Multi-Band Inter/Intra Team Radio (MBITR). Conduct Milestone I/II review. Conduct source selection and award EMD contract. (1QTR97-4QTR97)</li><li>• (\$109K) Multiband/Multimission Radio. Develop acquisition strategy. Develop specification, request for proposal, and cost estimate. (1QTR97-4QTR97)</li><li>• (\$1,121K) Special Mission Radio System (SMRS). Complete system test and evaluation. Initiate system engineering and development for technology insertion of remote network control, GPS, and improved waveform capabilities. (3QTR97-4QTR97)</li><li>• (\$331K) Joint Base Station (JBS). Continue system engineering, development, integration, and testing for technology insertion of Non-Developmental Item (NDI)/Commercial Off-the-Shelf (COTS)/Government Off-the-Shelf (GOTS) equipment. (1QTR97-4QTR97)</li><li>• (\$651K) SOF Tactical Assured Connectivity Systems (SOFTACS). Conduct market research and product development for block two technology insertion. (4QTR97)</li></ul>			
FY 1998 PLAN:			
<ul style="list-style-type: none"><li>• (\$822K) SMRS. Continue development of upgrades to remote network control, GPS, and improved waveform. Initiate upgrade of COMSEC capability to Top Secret. Conduct system test and evaluation of upgrade capabilities. (2QTR98-4QTR98)</li><li>• (\$435K) JBS. Continue system engineering, development, integration, and testing for technology insertion of NDI COTS/GOTS. (1QTR98-4QTR98)</li></ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700		
<ul style="list-style-type: none"><li>• (\$664K) SOF Tactical Assured Connectivity Systems (SOFTACS). Conduct system test and evaluation. Continue market research and product development for block two evolutionary technology insertions, system program management in support of market research, and initial test bed operations. (2QTR98-3QTR98)</li><li>• (\$209K) Command, Control, Communications, Computers and Intelligence Automation System (C4IAS). Design, integrate, and test specific adaptive network gateway technologies to permit seamless integration of existing networks. Begin development of database interoperability tools among existing networks using Common Object Request Broker Architecture and Hypertext Markup Language/Virtual Reality Markup Language technologies. (2QTR98-4QTR98)</li></ul>			
FY 1999 PLAN:			
<ul style="list-style-type: none"><li>• (\$336K) Special Operations Communications Assemblage Improvement. Conduct market research and perform integration and test of NDI upgrades. (1QTR99-4QTR99)</li><li>• (\$841K) Special Mission Radio System. Continue development of upgraded COMSEC capability. (1QTR99-3QTR99)</li><li>• (\$415K) Joint Base Station. Continue system engineering, development, integration, and testing for technology insertion of NDI COTS/GOTS. (1QTR99-4QTR99)</li><li>• (\$1,084K) SOF Tactical Assured Connectivity Systems. Conduct testbed operations for block 2 evolutionary technological insertions and system program management support. Conduct market research for block 3 evolutionary technological insertions. (2QTR99-3QTR99)</li><li>• (\$214K) Command, Control, Communications, Computers and Intelligence Automation System (C4IAS). Complete design, integration and testing of database development efforts. (1QTR99)</li></ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997																															
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700																																
<p><b>ACQUISITION STRATEGY:</b></p> <ul style="list-style-type: none"> <li>• SOF Tactical Assured Connectivity Systems (SOFTACS). The SOFTACS program will be managed under an evolutionary acquisition strategy. Evolutionary technology insertions (ETI) are integrated through block upgrades. ETIs will be supported by market research and test and evaluation which will be used to evaluate the benefits and impacts on the SOFTACS system.</li> </ul>																																		
<p><b>B. Program Change Summary</b></p> <table border="1"> <thead> <tr> <th></th> <th>FY96</th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget</td> <td>1.457</td> <td>2.648</td> <td>2.064</td> <td>3.421</td> <td>Cont.</td> </tr> <tr> <td>Appropriated Value</td> <td>1.727</td> <td>2.648</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Appropriated Value / President's Budget</td> <td>(.997)</td> <td>(.044)</td> <td>.066</td> <td>(.531)</td> <td></td> </tr> <tr> <td>Current Budget Submit</td> <td>.730</td> <td>2.604</td> <td>2.130</td> <td>2.890</td> <td>Cont.</td> </tr> </tbody> </table>						FY96	FY97	FY98	FY99	Total Cost	Previous President's Budget	1.457	2.648	2.064	3.421	Cont.	Appropriated Value	1.727	2.648				Adjustments to Appropriated Value / President's Budget	(.997)	(.044)	.066	(.531)		Current Budget Submit	.730	2.604	2.130	2.890	Cont.
	FY96	FY97	FY98	FY99	Total Cost																													
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Current Budget Submit	.730	2.604	2.130	2.890	Cont.																													
<p><b>Change Summary Explanation:</b></p> <p><b>Funding:</b> FY 1996 and FY 1997 decreases are a Congressional reduction for inflation adjustment and overhead/management savings, revised OMB economic assumptions, and a reprogramming to fund high priority D476 PSYOP Advanced Development projects (Special Operations Media System B and Family of Loudspeakers). FY 1998 increase due to revised cost estimate for Special Mission Radio System. FY 1999 decrease is to resource higher priority MFP-11 requirements.</p> <p><b>Technical:</b> None.</p>																																		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997									
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S700											
Schedule:   None.													
<u>C. Other Program Funding Summary</u>													
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	TotalCost		
PROC, Comm & Electronics	35.272	40.680	57.406	72.576	71.637	67.451	56.650	28.203	Cont.	Cont.			
<u>D. Schedule Profile</u>													
SOCA Improvement													
MS I/II													
Special Mission Radio System													
MS II (ETIs)													
DT/OT (ETIs)													
MS III													
IOC													
Joint Base Station													
MS II ETIs All Variants													
CDR (Variant I)													

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE											
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7						R-1 ITEM NOMENCLATURE / PROJECT NO. PE 11G0404BB Special Operations Tactical Systems Development / Project S700											
						FEBRUARY 1997											
<b>D. Schedule Profile (Con't)</b>																	
Joint Base Station (Con't)																	
DT/OT																	
MS III Variant 1																	
MS III Variant 2																	
FUE Variant 1																	
FUE Variant 2																	
SOF Tactical Assured Connectivity System																	
MS II																	
DT/OT																	
MS III																	
MS II (ETI)																	
IOC																	
C4I Automation																	
ETI Block Upgrade (Design Gateway Technology)																	
DT/OT																	
ETI Block Upgrade (Design Data Base)																	
DT/OT																	



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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S700			
A. Project Cost Breakdown (\$ in thousands)		FY96	FY97	FY98	FY99
1. Aircraft Wireless Intercom System DT&E	20		15		
2. Multi-Band Inter/Intra Team Radio Government Engineering Support Hardware Development	327		113 264		
3. Multiband/Multimission Radio Government Engineering Support	49		109		
4. SOCA Improvement Government Engineering Support					236 100
5. Special Mission Radio System ETIs Government Engineering Support			766 75 280		560 80 201
6. Joint Base Station ETIs Government Engineering Support	234 100		331		300 115
7. SOF Tactical Assured Connectivity DT&E Technology Insertion/Integration Government Engineering Support				100 300 264	100 440 544
8. C4I Automation DT&E Government Engineering Support				149 60	150 64
TOTAL:	730		2,604	2,130	2,890

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Exhibit R-3

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
R-1 ITEM NOMENCLATURE										PE 1160404BB Special Operations Tactical Systems Development / Project S700	
APPROPRIATION / BUDGET ACTIVITY										RDT&E, DEFENSEWIDE / 7	
B. Budget Acquisition History and Planning Information										Actual or Budget Value (\$ in thousands)	
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations											
USA FM SATCOM/CECOM, Ft Mon. NJ	MIPR/ALLOT	Various	Cont.	Cont.	1,147		414				1,147
SSDS, Englewood CO	CPFF	Jun 93	Cont.	Cont.	5,472						5,472
Mitre, McLean VA	CPFF	Oct 93	5,472	5,472	603						603
NAWCAD, St Inigoes MD	MIPR	Various	Cont.	Cont.	8,420	234	331				8,624
NSMA, Arlington, VA	ALLOT	Various	Cont.	Cont.	1,000		766				1,802
DISA, Reston VA	ALLOT	Various	Cont.	Cont.	500						500
TBD	CPFF	Dec 96	NA	Cont.			264	1,175	1,300	Cont.	243
Misc	NA	NA	NA	NA							Cont.
Support and Management Organizations											
Misc.	Var	Var	Cont.	Cont.	516	476	534	506	1,039	Cont.	Cont.
Test and Evaluation Organizations (Misc)	NA	NA	NA	NA		20	295	449	551		NA
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Subtotal Product Development					17,142	234	1,775	1,175	1,300	Cont.	Cont.
Subtotal Support and Management					516	476	534	506	1,039	Cont.	Cont.
Subtotal Test and Evaluation						20	295	449	551		Cont.
Total Project					17,658	730	2,604	2,130	2,890	Cont.	Cont.



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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE										FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE / PROJECT NO.										Total Cost	
RDT&E, DEFENSEWIDE / 7		PE 1160404BB Special Operations Tactical Systems Development / Project S800										Cost to Complete	
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cont.			
S800, Special Operations Munitions Advanced Development		9.357	12.208	3.700	4.698	6.432	15.233	15.482	18.563	Cont.			

A. Mission Description and Budget Item Justification

This project provides for the acquisition of selected, specialized munitions and equipment to meet unique Special Operations Forces (SOF) requirements. This is a continuing program. Sub-projects include:

- Ammunition Development. Air Force Special Operations Command requires a high fragmentation round to defeat light material and personnel targets in order to conduct close air support in increasingly hostile environments while reducing Gunship exposure to anti-aircraft fire, thereby increasing survivability. Additionally, a 105mm guided projectile is required to improve first shot kill capabilities for hardened mobile and stationary targets while minimizing collateral damage.
- Improved Limpet Assembly Modular (ILAM). The ILAM will replace the existing Limpet Assembly Modular. The ILAM is required for SEAL Delivery Vehicle attacks against ships, submarines, nested patrol craft, submerged harbor facilities, and various other maritime targets. The ILAM will provide greater explosive weight to be delivered to the target, decrease time-on-target by improving handling procedures, and result in an enhanced probability of mission success.
- Lethality Enhancements. Conducts a front end analysis to develop necessary improvements to the gun suite for a 25-30 year life cycle. This analysis is critical due to the current inadequacy in the 20mm system and a paradigm shift that has occurred due to necessity of missions requiring increased standoff ranges and the resulting lack of effectiveness.
- Penetration Augmented Munition. Presently SOF has a limited capability to significantly damage concrete structures or pylons

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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S800	
<p>assigned as targets. This program develops a man portable/emplaced munition that defeats large reinforced concrete structures, replaces more than 200 pounds of C4 explosive, reduces time-on-target, and represents new capability for SOF by being the first hand employed munition to use tandem Explosively Formed Penetrator (EFP) warheads and in-line electronic fuzing.</p> <ul style="list-style-type: none"> <li>• Remote Activated Munitions System (RAMS). Provides a capability to remotely control detonation of demolition charges or the remote operation of other items of equipment such as beacons, laser markers, radios, and weapons.</li> <li>• Special Operations Forces (SOF) Demolition Kit. The kit consists of inert hardware sets for EFPs, conical shaped charges and linear shaped charges, along with tools, equipment, and attachment devices for constructing and emplacing a variety of demolition charges. The kit allows the SOF operator to tailor the demolition charges to the target providing greater lethality and mission flexibility.</li> </ul> <p>FY 1996 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> <li>• (\$301K) Ammunition Development. Transitioned the PGU-9A/B fuze retrofit project to sustainment. Formulated a program to develop a high fragmentation 105mm round. Completed analysis for an advanced prototype of a guided 105mm projectile and advance to a Milestone 0 decision. Reviewed technical data package. (2QTR96-4QTR96)</li> <li>• (\$723K) Lethality Enhancements. Completed medium caliber analysis project. (2QTR96-4QTR96)</li> <li>• (\$4,748K) Penetration Augmented Munition. Designed electronic firing train and conducted tactical systems integration tests. (1QTR96-4QTR96)</li> <li>• (\$2,766K) RAMS. Continued Engineering and Manufacturing Development (EMD) and completed testing. Produced technical data package for the transmitter, auxiliary power supply and Type A Receiver. (1QTR96-4QTR96)</li> </ul>			

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<ul style="list-style-type: none"><li>• (\$819K) Special Operations Forces (SOF) Demolition Kit. Continued design, fabrication and testing of various size warheads. (1QTR96-4QTR96)</li></ul>			
FY 1997 PLAN:			
<ul style="list-style-type: none"><li>• (\$200K) Ammunition Development. Transition adaptable munitions identified through the analysis projects to full program integration for high fragmentation and guided ammunition. (1QTR97-4QTR97)</li><li>• (\$7,000K) Penetration Augmented Munition. Complete EMD and testing; conduct Milestone III review. (1QTR97-4QTR97)</li><li>• (\$3,507K) Remote Activated Munitions System (RAMS). Complete technical data package for the transmitter, auxiliary power supply and Type A receiver. Conduct Milestone III review for transmitter and Type A receiver. Initiate design of Type B receiver. (1QTR97-4QTR97)</li><li>• (\$1,501K) SOF Demolition Kit. Complete EMD and testing; conduct Milestone III review for the small, medium, and large warheads. (1QTR97-4QTR97)</li></ul>			
FY 1998 PLAN:			
<ul style="list-style-type: none"><li>• (\$975K) SOF Demolition Kit. Initiate design, fabrication and testing of extra large warhead and preplanned product improvement warheads. (1QTR98-4QTR98)</li><li>• (\$1,896K) RAMS. Complete EMD and conduct Milestone III review for Type B receiver. Initiate design of Type C receiver. (1QTR98-4QTR98)</li></ul>			

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<ul style="list-style-type: none"> <li>• (\$829K) Improved Limpet Assembly Modular (ILAM). Initiate program and engineering efforts for the design and test. (1QTR98-4QTR98)</li> </ul>			
FY 1999 PLAN:			
<ul style="list-style-type: none"> <li>• (\$945K) Special Operations Forces (SOF) Demolition Kit. Continue design, fabrication and testing of preplanned product improvement warheads. Complete Engineering and Manufacturing Development (EMD) and testing; conduct Milestone III review for extra large warhead. (1QTR99-4QTR99)</li> <li>• (\$1,045K) Remote Activated Munitions System (RAMS). Complete EMD and testing and conduct Milestone III review for Type C receiver. (1QTR99-4QTR99)</li> <li>• (\$2,708K) ILAM. Continue design and test of ILAM. Conduct Milestone I/II review to enter EMD. (1QTR99-4QTR99)</li> </ul>			
ACQUISITION STRATEGY:			
<ul style="list-style-type: none"> <li>• RAMS. Developmental program managed by the Army Project Manager for Mines, Countermine and Demolitions. Design being developed by government engineering at the Army Research Laboratory. Initial production to be conducted at the Naval Air Warfare Center, Indianapolis, IN.</li> <li>• ILAM. Program managed by Naval Sea Systems Command, PMS 340. Designs will be developed by Naval Surface Warfare Centers.</li> </ul>			

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<p><u>B. Program Change Summary</u></p> <p>Previous President's Budget</p> <p>Appropriated Value</p> <p>Adjustments to Appropriated Value / President's Budget</p> <p>Current Budget Submit</p>						
		FY96	FY97	FY98	FY99	Total Cost
		7.639	9.016	3.212	2.740	Cont.
		8.254	12.816			
		1.103	(.608)	.488	1.958	
		9.357	12.208	3.700	4.698	Cont.
<p>Change Summary Explanation:</p> <p>Funding: FY 1996 increase reflects realignments to fund higher priority MFP-11 requirements. FY 1997 net decrease reflects project cost share for the Small Business Innovative Research Program and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 adjustments are repricing of budgets to reflect the Administration's revised economic forecast and increases to fund high priority MFP-11 requirements.</p> <p>Schedule: None.</p> <p>Technical: None.</p>						



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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)					DATE		FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160404BB Special Operations Tactical Systems Development / Project S800							
C. <u>Other Program Funding Summary</u>									
FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost
PROC, Ordnance Acq.	18.110	13.161	17.202	15.828	9.185	8.928	9.574	12.594	Cont. Cont.
D. <u>Schedule Profile</u>									
SOF Demolition Kit									
MS I/II									
MS III (Small, Medium, Large Warheads)									
MS III (Extra Large Warhead)									
Penetration Augmented Munition									
MS III									
Remote Activated Munitions System									
MS III (Transmitter and Type A Receiver)									
MS III (Type B Receiver)									
MS III (Type C Receiver)									
Improved Limpet Assembly Modular									
MS I/II									

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160404BB Special Operations Tactical Systems Development / Project S800		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>
1. AC-130U Gunship Ammo Development	301	200	
2. AC-130U Gunship Lethality Enhancements	723		
3. Demolition Kit	819	1,501	945
4. Penetration Augmented Munition	4,748	7,000	
5. Remote Activated Munitions System	2,766	3,507	1,045
6. Improved Limpet Assembly Modular			829
TOTAL:	9,357	12,208	3,700
			4,698

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
R-1 ITEM NOMENCLATURE										PE 1160404BB Special Operations Tactical Systems Development / Project S800	
APPROPRIATION / BUDGET ACTIVITY										RDT&E, DEFENSEWIDE / 7	
B. Budget Acquisition History and Planning Information										Actual or Budget Value (\$ in thousands)	
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations Air Force Materiel Command, LIW-A Army PM-MCD, ARDEC, ARL Alliant Tech Systems, MN	ALLOT ALLOT CPTF	various various Jul 88	NA NA 35,740	NA NA 35,740	6,465 36,867 27,309	1,024 4,595 3,738	200 5,015 4,693	3,200	4,198	Cont. Cont. 0	Cont. Cont. 35,740
Support and Management Organizations											
Test and Evaluation Organizations AF Special Mission OT&E Center US Army Test & Evaluations Command	ALLOT MTPR	Dec 94 Jan 97	NA NA	NA NA	1,500		2,300	500	500		1,500 3,300
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program	
Subtotal Product Development				70,641	9,357	9,908	3,200	4,198	Cont.	Cont.	
Subtotal Support and Management				1,500		2,300	500	500		4,800	
Subtotal Test and Evaluation				72,141	9,357	12,208	3,700	4,698	Cont.	Cont.	
Total Project											

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Exhibit R-3

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE FEBRUARY 1997									
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	COST (in millions)	R-1 ITEM NOMENCLATURE PE 1160405BB Special Operations Intelligence Systems Development									
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160405BB (Special Operations Intelligence Systems Development)		2.880	1.946	4.914	1.839	2.077	3.862	1.432	1.466	Cont.	Cont.
S400, SOF Intelligence R&D		2.880	1.946	4.914	1.839	2.077	3.862	1.432	1.466	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>Projects provide for identification, development, testing, and integration of selected SOF intelligence equipment to eliminate deficiencies in providing timely intelligence to deployed forces.</p>											



RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S400, SOF Intelligence R&D		2.880	1.946	4.914	1.839	2.077	3.862	1.432	1.466	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>This project provides for the identification, development, and testing of Special Operations Forces (SOF) intelligence equipment to identify and eliminate deficiencies in providing timely intelligence to deployed forces. The following distinct sub-projects address the primary areas of intelligence dissemination, sensor systems, integrated threat warning to SOF mission platforms, and tactical exploitation of national capabilities. USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities into the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture will employ the latest standards and technology by transitioning from separate systems to full integration with the infosphere. The infosphere will allow SOF elements to operate with any force combination in multiple environments. The C4I programs funded in this project are grouped by the level of organizational element they support: Operational Element (Team), Above Operational Element (Deployed), and Above Operational Element (Garrison). Sub-projects include:</p> <p><b>OPERATIONAL ELEMENT (TEAM)</b></p> <ul style="list-style-type: none"> <li>Multi-mission Advanced Tactical Terminal (MATT). The MATT project provides near-real-time operational intelligence information from national and tactical sources directly to Special Operations Forces (SOF) aircraft, ground-based units, and eventually maritime elements. The information will provide situational awareness, threat avoidance, and target acquisition, and will support mission planning. The MATT receiver/processor is a miniaturized, UHF, multi-channel receiver. It has embedded communications security and correlation, and programmable capability, including the potential incorporation of</li> </ul>											

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	
<p>advanced cryptographic devices and transmit capabilities, which will transform the MATT into a highly integrated, scalable C4I system.</p> <ul style="list-style-type: none"> <li>Joint Intelligence System Integration. Funds a series of integration efforts to incorporate various SOF intelligence systems on the respective platforms employed by each of the SOF commands. Integration efforts will permit the operation of each intelligence system from within a controlling suite installed aboard a SOF platform without any system or platform degradation. Supports the joint compatibility and interoperability strategy of USSOCOM, as well as ensuring maximum use of Joint Deployable Intelligence Support System (JDISS)-compliant, UNIX-based hardware and software. This sub-project ends in FY 1996.</li> <li>PRIVATEER. PRIVATEER is part of an evolutionary signal intelligence system migration and acquisition program that provides a permanent full spectrum Radar and Communications Early Warning capability aboard Cyclone-Class Patrol Coastal (PC) and the MK V Special Operations Craft (SOC). The PC configuration is confined to the electronic surveillance mission area, while the MK V SOC configuration has been expanded to include an electronic attack capability for self-defense. A subset of the Joint Threat Warning System, PRIVATEER hosts a common software architecture that controls a variety of hardware modules designed to satisfy the unique platform requirements of each ship class. System configuration provides the equipment necessary to monitor and provide direction finding on radar and communications signals of interest. Also provides broadcast threat warning capability. Architecture is JDISS/Joint Maritime Communications and Intelligence Support System compliant with UNIX-based software.</li> <li>SILENT SHIELD. The SILENT SHIELD is part of an evolutionary Joint Threat Warning System migration being developed to support SOF-wide operations. System development emphasizes a rapid prototyping effort to develop, test and field systems that provide direct threat warning and enhanced situational awareness data to SOF aircrews at the Collateral SECRET level.</li> <li>Tactical Exploitation of National Capabilities (TENCAP). TENCAP is a project to introduce and integrate national systems capabilities into the SOF force structure and operations. TENCAP activities include increasing national systems awareness;</li> </ul>	

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400	
<p>demonstrating the tactical utility of national system data; testing technology and evaluating operational concepts in biennial Joint Staff Special Projects; and transitioning promising concepts and technologies into the SOF materiel inventory.</p> <ul style="list-style-type: none"> <li>Joint Threat Warning System (JTWS). JTWS develops a modular, scalable system that consists of user defined, integrated common hardware modules driven by an interoperable software architecture and configurable for use in manpack, unattended, and platform versions (aircraft, ground, and maritime). JTWS functional requirements include communications monitoring and direction finding, and receipt and correlation of near-real-time tactical intelligence broadcasts.</li> </ul> <p>ABOVE OPERATIONAL ELEMENT (DEPLOYED)</p> <ul style="list-style-type: none"> <li>Multi-mission Advanced Tactical Terminal and Joint Deployable Intelligence Support System-Special Operations Command Research, Analysis, and Threat Evaluation System (JDISS-SOCRATES) are also planned for this level.</li> </ul> <p>ABOVE OPERATIONAL ELEMENT (GARRISON)</p> <ul style="list-style-type: none"> <li>JDISS-SOCRATES. JDISS-SOCRATES provides a wide range of mission required automated intelligence and imagery support to USSOCOM, component commands and operating forces. JDISS-SOCRATES, a Wide Area Network based multi-functional intelligence system, incorporates a variety of computers, data bases, intelligence communication systems, secure phones, facsimile equipment, imagery processing, secondary imagery dissemination and map handling equipment. JDISS-SOCRATES provides SOF with unprecedented access to both national and specially-focused intelligence products, satisfying long-standing intelligence deficiencies identified in all five regional Commander In Chief Theater Intelligence Architectures. Product improvements are focused on integration of emerging intelligence community systems, technology, and standards into the JDISS-SOCRATES architecture. Near-term improvements are focused on implementation of UNIX-based client server environment and integration of Department of Defense Intelligence Information System Management Board directed Joint Deployable Intelligence Support System (JDISS) standards.</li> </ul>		



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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		
FY 1996 ACCOMPLISHMENTS:		
<ul style="list-style-type: none"><li>• (\$823K) Joint Intelligence Systems Integration. Developed, downsized, integrated, and tested a deployable electronic intelligence package. Provided a multi-scanner/modern modulation intercept capability for testing and evaluation. Continued to integrate and test secure satellite communications for PRIVATEER aboard Patrol Coastal ships. (2QTR96-4QTR96)</li><li>• (\$690K) Tactical Exploitation of National Capabilities. Assessed technology and operational utility of HAMLET'S FOREST project and provided systems engineering and technical assistance (SETA) support. (2QTR96-1QTR97)</li><li>• (\$97K) JDISS-Special Operations Command Research, Analysis and Threat Evaluation System (JDISS-SOCRATES). Engineered development and technical integration of intelligence migration products into the JDISS-SOCRATES architecture. (2QTR96)</li><li>• (\$1,270K) Multi-mission Advanced Tactical Terminal (MATT). Continued platform integration efforts and software development. (2QTR96-4QTR96)</li></ul>		
FY 1997 PLAN:		
<ul style="list-style-type: none"><li>• (\$1,019K) Joint Threat Warning System (JTWS). Design and develop a multi-functional trainer for the JTWS, beginning with the maritime modules supporting the cyclone-class Patrol Coastal (PC) and the MK-V Special Operations Craft (SOC). (2QTR97)</li><li>• (\$807K) Tactical Exploitation of National Capabilities (TENCAP). Develop and test HAMLET'S TRACK tagging devices. Evaluate new imagery exploitation applications using the HAMLET'S COMMON test facility. Demonstrate the capability to</li></ul>		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400		
<p>inject Special Reconnaissance reporting into intelligence broadcasts by Project TOWN CRIER. Continue to provide systems engineering and technical assistance. (1QTR97-2QTR97)</p> <ul style="list-style-type: none"> <li>• (\$120K) JDISS-SOCRATES. Provide an on-site Long-Range Information Networked Communications Services (LINCS) representative at USSOCOM for Alpha design and Beta demonstration. (1QTR97)</li> </ul> <p>FY 1998 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$947K) TENCAP. Continue to assess technology and operational utility of HAMLET's TRACK (tagging and tracking technologies). Participate in JCS and theater CINC advanced concepts technology demonstrations which evaluate National Technical Means support to amphibious operations. (1QTR98-3QTR98)</li> <li>• (\$3,488K) PRIVATEER. Support technology insertion of broadcast threat warning capabilities and migration to Defense Information Infrastructure (DII) Common Operating Environment (COE). Effort includes related special processing, analysis and display capability supporting both Patrol Coastal and MK V Special Operations Craft (SOC). Continue Joint Deployable Intelligence Support System/Joint Maritime Communications and Intelligence Support System architecture migration into the DII COE. Deliver, install and evaluate electronic attack capability for initial operational test and evaluation onboard the MK V SOC. (1QTR98-3QTR98)</li> <li>• (\$479K) SILENT SHIELD. Continue integration and testing aboard SOF aircraft initiated under the Joint Intelligence Systems Integration Program in FY 1996. (1QTR98-2QTR98)</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400	
<p>FY 1999 PLAN:</p> <ul style="list-style-type: none"> <li>• (\$1,079K) TENCAP. Participate in JCS and theater CINC advanced concepts technology demonstrations which continue to evaluate National Technical Means support to amphibious operations, overall interoperability and support of combined SOF and conventional operations. Assess technology and operational utility of HAMLET's FOREST and HAMLET's TRACK. (1QTR99-3QTR99)</li> <li>• (\$760K) SILENT SHIELD. Continue integration and testing aboard SOF aircraft. (1QTR99)</li> </ul> <p>ACQUISITION STRATEGY:</p> <ul style="list-style-type: none"> <li>• PRIVATEER. An evolutionary acquisition program and signal intelligence migration system that provides a permanent full spectrum Radar and Communications Early Warning capability aboard Patrol Coastal (PC) and MK V Special Operations Craft (SOC). The PC configuration is confined to the electronic surveillance mission area, while the MK V SOC configuration has been expanded to include the electronic attack capability for self-defense. A subset of the Joint Threat Warning System, PRIVATEER hosts a common software architecture that controls a variety of hardware modules developed and integrated to satisfy the unique platform requirements of each ship class.</li> </ul>			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400			
<b>B. Program Change Summary</b>				
Previous President's Budget		FY96	FY97	FY98
Appropriated Value		2.843	1.315	2.446
Adjustments to Appropriated Value / President's Budget		2.901	2.315	2.446
Current Budget Submit		(.021)	(.369)	(.607)
		2.880	1.946	1.839
				Cont.
<b>Change Summary Explanation:</b>				
Funding:	FY 1996 decrease for Congressional inflation adjustment and overhead/management savings. FY 1997 net decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, Congressional adjustment to Defense-wide investment appropriations, and realignments to resource other high priority MFP-11 requirements. FY 1998 and FY 1999 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast and realignments to resource other high priority MFP-11 requirements.			
Schedule:	None.			
Technical:	None.			

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)						DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7			R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160405BB Special Operations Intelligence Systems Development / Project S400									
C. <u>Other Program Funding Summary</u>												
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete	Total Cost		
PROC, SOF Intel Systems	25.979	19.846	21.175	21.188	23.823	30.876	25.215	15.575	Cont.	Cont.		
D. <u>Schedule Profile</u>												
	FY96		FY97		FY98		FY99					
	1	2	3	4	1	2	3	4	1	2	3	4
JDISS-SOCRATES Version Upgrades												
SILENT SHIELD												
Integration and Test												
Milestone II												
Milestone III												
PRIVATEER Evolutionary Technology												
Insertion Special Program Review												

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE PE 1160405BB Special Operations Intelligence Systems Development / Project S400		
A. <u>Project Cost Breakdown</u> (\$ in thousands)	<u>FY96</u>	<u>FY97</u>	<u>FY98</u> <u>FY99</u>
1. JDISS-SOCRATES			
Government Engineering Support	97		
Software Development and Integration		120	
2. Joint Intelligence Systems Integration			
OT&E	233		
Government Engineering Support	66		
Software Development	524		
3. Tactical Exploitation of National Capabilities			
Systems Engineering	440	387	420
Hardware Prototyping	250	420	659
4. Multi-Mission Advanced Tactical Terminal			
Software Development and Integration	666		
Platform Integration Study	200		
Hardware Development	404		
5. SILENT SHIELD			
DT&E/OT&E			760
6. PRIVATEER			
Software Development			488
DT&E			1,500
OT&E			1,500
7. JTWS			
Hardware Prototyping		1,019	
TOTAL:	2,880	1,946	4,914 1,839

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Exhibit R-3

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RDT&E PROGRAM ELEMENT / PROJECT COST BREAKDOWN (R-3)										DATE	FEBRUARY 1997
R-1 ITEM NOMENCLATURE										PE 1160405BB Special Operations Intelligence Systems Development / Project S400	
Actual or Budget Value (\$ in thousands)											
Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Product Development Organizations											
SAIC, McLean VA	C/CPEF	Various	166	166	166						286
NRL, Washington DC	MIPR	Various	1,456	1,456	1,456						1,456
E-Systems, Greenville TX	C/CPEF	Sep 92	3,960	3,960	3,960						3,960
USAF, Santa Clara CA	C/CPEF	Aug 92	2,953	2,953	2,192	761					2,953
USAF, SAF Washington DC	Various	Various	Cont.	Cont.	1,950	150				Cont.	Cont.
Defense, Opal Spt Ofc, Wash DC	SS/CPEF	Aug 94	10,450	10,450	200					Cont.	10,450
LORAL Fed Sys, Owego NY	Various	Various	Cont.	Cont.	10,450					Cont.	Cont.
NRAD, San Diego CA	Various	Various	Cont.	Cont.	892	536				Cont.	Cont.
NISE-E, Charleston, SC	MIPR	Dec 95	215	215	1,375	252		3,488		Cont.	Cont.
NSA, Washington, DC	PA	Jul 95	55	55	215					Cont.	215
NAWC-AD, St Ingeos, MD	C/CPEF	Jul 96	404	404	404					Cont.	404
Aeronix, Melbourne, FL	Various	Various	N/A	N/A	13,325	337	439	1,026	1,419		N/A
Miscellaneous											
Support and Management Organizations											
Booz-Allen & Hamilton	CPEF	Apr 93			760	440	387	400	420	Cont.	Cont.
Test and Evaluation Organizations											
DESA, Kirtland AFB, NM	MIPR	Feb 95	217	217	217						217
Government Furnished Property											
Item Description	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Delivery Date		Total Prior to FY96	Budget FY96	Budget FY97	Budget FY98	Budget FY99	Budget to Complete	Total Program
Subtotal Product Development					36,236	2,440	1,559	4,514	1,419	Cont.	Cont.
Subtotal Support and Mgmt					760	440	387	400	420	Cont.	Cont.
Subtotal Test and Evaluation					217					217	217
Total Project					37,213	2,880	1,946	4,914	1,839	Cont.	Cont.

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Exhibit R-3

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE FEBRUARY 1997									
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	COST (in millions)	R-1 ITEM NOMENCLATURE					PE 1160407BB SOF Medical Technology Development				
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160407BB (SOF Medical Technology Development)		1.747	1.803	2.029	2.077	2.126	2.177	2.224	2.277	Cont.	Cont.
S275, SOF Medical Technology R&D		1.747	1.803	2.029	2.077	2.126	2.177	2.224	2.277	Cont.	Cont.
<p><b>A. <u>Mission Description and Budget Item Justification</u></b></p> <p>Projects provide studies and laboratory prototypes for USSOCOM to link non-system basic research and exploratory development to SOF specific system engineering and manufacturing development and procurement. The focus is on medical technologies, centering on physiologic, psychologic and ergonomic factors affecting the ability of forces to perform their missions.</p>											





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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE									
APPROPRIATION / BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE / PROJECT NO.									
RDT&E, DEFENSEWIDE / 7		PE 1160407BB SOF Medical Technology Development / Project S275									
COST (In Millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S275, SOF Medical Technology R&D		1.747	1.803	2.029	2.077	2.126	2.177	2.224	2.277	Cont.	Cont.

A. Mission Description and Budget Item Justification

This program provides studies and non-system exploratory advanced technology development. The focus is on medical technologies, centering on physiologic, psychologic, and ergonomic factors affecting the ability of Special Operations Forces (SOF) to perform their missions. Current equipment and technology does not meet force requirements. The unique nature of special operations requires unique approaches to combat casualty care, medical equipment and other life support capabilities including life support for high altitude parachuting, combat swimming and other SOF unique missions. This program provides guidelines for the development of selection and conditioning criteria, thermal protection, decompression procedures, combat casualty procedures and life support systems. The program supports the development of biomedical enhancements for the unique requirements of all SOF in the conduct of their diverse missions. This effort is defined by the following seven areas of investigation:

- Combat casualty management in SOF operations will: (1) review the emergency medical equipment currently used in the SOF community and compare this to currently available civilian technology; it will also provide field testing of emergency medical equipment in the adverse environmental conditions encountered in SOF; (2) evaluate current tactical combat casualty care doctrine to ensure consideration of the wide variety of tactical scenarios encountered and apply the latest concepts in casualty care to these circumstances; and, (3) develop CD-ROM based computer programs with voice capability to conduct medical interviews in multiple foreign languages.
- Decompression procedures for SOF diving operations will: (1) decrease the decompression obligation in SOF diving operations through the use of surface-interval oxygen breathing; and, (2) investigate pre-oxygenation requirements for high-altitude SOF parachute operations.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160407BB SOF Medical Technology Development / Project S275	FEBRUARY 1997
<p>APPROPRIATION / BUDGET ACTIVITY RDT&amp;E, DEFENSEWIDE / 7</p>	<ul style="list-style-type: none"> <li>Exercise-related injuries will evaluate the effectiveness of applying sports medicine diagnostic, therapeutic, and rehabilitative techniques in management of the traumatic and overuse injuries commonly encountered among SOF operators.</li> <li>Inhaled gas toxicology will: evaluate the feasibility of using pharmacologic intervention to reduce or eliminate the possibility of central nervous system toxicity.</li> <li>Medical sustainment training techniques will: (1) examine novel ways of both providing and documenting medical sustainment training for SOF corpsmen and physicians; and, (2) develop a system for constantly upgrading the medical expertise of SOF medical personnel by incorporating new research reports and clinical information into a CD-ROM base computer system which can be used by medical personnel in isolated duty circumstances.</li> <li>Mission-related physiology will: (1) develop accurate measures to evaluate SOF mission-related performance; (2) evaluate the suitability of photorefractive keratectomy, a new refractive surgical procedure, for special operations personnel; (3) delineate nutritional strategies designed to help personnel apply known nutritional concepts to optimize performance in mission and training scenarios; (4) evaluate potential ergogenic agents as they apply to enhancing mission-related performance; (5) study the safety and efficacy of using caffeine to increase performance in sustained operations; (6) develop a quantitative test for night vision suitable for screening SOF candidates and study ways to enhance unaided night vision; (7) develop techniques for using oxygen to increase breathhold dive time; and, (8) study pharmacologic measures to prevent acute mountain sickness in high terrestrial SOF operations.</li> <li>Thermal protection will: (1) conduct a survey of available thermal protection garments and conduct a comparative study to determine their relative effectiveness at protecting personnel engaged in small boat operations; and, (2) evaluate the efficacy of current thermal protective measures in maintaining combat swimmer performance.</li> </ul>

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160407BB SOF Medical Technology Development / Project S275	
<p><b>FY 1996 ACCOMPLISHMENTS:</b></p> <ul style="list-style-type: none"> <li>• (\$1,350K) Continued ongoing studies as follows: SOF Computer-Assisted Medical Reference System; Computer-Based SOF Corpsman Training Program; Quantification of Mission-Related Performance; Excimer Laser Photorefractive Keratectomy in SOF Personnel; Tactical Combat Casualty Care in Special Operations; Combat Casualty Equipment Review; Air/0.7 Atmosphere Absolute Decompression; Thermal Protection in Small Boat Operations; Ergogenics (Performance Enhancing Agents) in SOF Operations; Performance Enhancement with Caffeine; Pre-Oxygenation Requirements in High Altitude Low Opening/High Altitude Parachute Operations; Night Vision Enhancement; and, Hypercarbia Recognition Training. (1QTR96-2QTR96)</li> <li>• (\$397K) Initiated new studies such as: Thermal Protection and Diver Performance in SOF Combat Swimmers; Laser Eye Protection in Special Operations; Reduction of Oxygen Toxicity Risk with Modified Draegar LAR V Operating Procedures; SOF Physical Fitness Guide. (1QTR96-2QTR96)</li> </ul> <p><b>FY 1997 PLAN:</b></p> <ul style="list-style-type: none"> <li>• (\$1,206K) Continue ongoing studies as follows: SOF Computer-Assisted Medical Reference System; Special Operations Interactive Medical Training Program; Combat Casualty Equipment Review; Ergogenics (Performance Enhancing Agents) in Special Operations; Laser Eye Protection in Special Operations; Thermal Protection and Diver Performance in Special Operations Forces (SOF) Combat Swimmers; Tactical Combat Casualty Care in SOF Operations; Excimer Laser Photorefractive Keratectomy in SOF Personnel; Night Vision Enhancement; Pre-Oxygenation Requirements in High Altitude Low Opening Operations; SOF Physical Fitness Guide; Air/0.7 Atmosphere Absolute Decompression. (1QTR97)</li> <li>• (\$597K) Initiate new studies such as: Thermal Stress in Current Special Operations; Draegar LAR V Canister Limits for SEAL Delivery Vehicle (SDV) Operations; Special Operations World Wide Area Medical Information; and, Oxygen Enhanced Breathhold Diving. (1QTR97-2QTR97)</li> </ul>		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160407BB SOF Medical Technology Development / Project S275		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		
FY 1998 PLAN:		
<ul style="list-style-type: none"><li>• (\$1,527K) Continue ongoing studies as follows: SOF Interactive Medical Training Program, Tactical Combat Casualty Equipment Review, Combat Casualty Care in SOF Operations, Thermal Stress in Current Special Operations, Draeger LAR V Canister Limits for Seal Delivery Vehicle (SDV) Operations and Cold Water Immersion and SDV Performance, SOF Computer Assisted Medical Reference System, Ergonomics (Performance Enhancing Agents) in Special Operations, Laser Eye Protection in Special Operations, Excimer Laser Photorefractive Keratectomy in SOF Personnel, Night Vision Enhancement, Pre-Oxygenation Requirements in High Altitude Low Opening/High Altitude Parachute Operations, and Special Operations World Wide Area Medical Information. (1QTR98)</li><li>• (\$502K) Initiate new studies as follows: Respiratory Muscle Endurance Testing, Loadbearing Conditioning, Effect of Submarine Deployments on SOF Mission-Related Performance, Adjuncts to Recompression Therapy, Testing of Exotemp Active Thermal Protection System, Oxygen Arterial Gas Embolism, Tactical Health Risk Assessment in SO, and Evaluation of Thermal Protection in AFSOC Operations. (1QTR98)</li></ul>		
FY 1999 PLAN:		
<ul style="list-style-type: none"><li>• (\$1,252K) Continue ongoing studies as follows: Combat Casualty Equipment Review, Tactical Combat Casualty Care in SOF Operations, Thermal Stress in Current Special Operations, Respiratory Muscle Endurance Testing, Special Operations World Wide Area Medical Information System, Special Operations Interactive Medical Training, SOF Computer-Assisted Medical Reference System, and Cold Water Immersion and SEAL SDV Performance. (1QTR99)</li><li>• (\$825K) Initiate new studies as follows: Tactical Combat Casualty Care/Acute Trauma Management System, Preventive Medicine, Potable Water Sanitation System, Advanced SOF Diving Procedures, Enhanced Life Support for ASDS, Application of Telecommunication Technology to support SOF Medics, SOF Medical Virtual Training and Humanitarian/Refugee/Crisis Response Medical Support. (1QTR99)</li></ul>		

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE	FEBRUARY 1997			
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160407BB SOF Medical Technology Development / Project S275				
ACQUISITION STRATEGY: NA						
B. <u>Program Change Summary</u>						
Previous President's Budget		FY96	FY97	FY98	FY99	Total Cost
		1.814	1.887	2.035	2.087	Cont.
Appropriated Value		1.891	1.887			
Adjustments to Appropriated Value / President's Budget		(.144)	(.084)	(.006)	(.010)	
Current Budget Submit		1.747	1.803	2.029	2.077	Cont.
Change Summary Explanation:						
Funding:		The FY 1996 decrease for Congressional inflation adjustments and overhead/management savings. FY 1997 decrease reflects project cost share for the Small Business Innovative Research Program, Non-Federally Funded Research and Development Centers, and Congressional adjustment to Defense-wide investment appropriations. FY 1998 and FY 1999 decrease is due to repricing of budgets to reflect the Administration's revised economic forecast.				
Schedule:		None.				
Technical:		None.				
C. <u>Other Program Funding Summary</u> None.						
D. <u>Schedule Profile</u> NA.						



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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7		R-1 ITEM NOMENCLATURE						PE 1160408BB SOF Operational Enhancements			
COST (in millions)		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
PE 1160408BB (SOF Operational Enhancements)		16.646	28.177	26.357	13.790	14.554	40.992	12.816	12.747	Cont.	Cont.
S500A, SOF Operational Enhancements		16.646	28.177	26.357	13.790	14.554	40.992	12.816	12.747	Cont.	Cont.
<p><u>A. Mission Description and Budget Item Justification</u></p> <p>Provides funding for classified SOF projects as directed by the Secretary of Defense and/or the Joint Staff. Specific justification is provided under separate cover.</p>											





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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE								
		JUNE 1996								
APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSEWIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160408BB SOF Operational Force Enhancements / Project S500A									
COST (In Millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost to Complete	Total Cost
S500A, SOF Operational Enhancements	16.646	28.177	26.357	13.790	14.554	40.992	12.816	12.747	Cont.	Cont.
<p><b>A. Mission Description and Budget Item Justification</b></p> <p>Provides funding for classified RDT&amp;E efforts. Description and justification is provided under separate cover.</p>										



## UNITED STATES SPECIAL OPERATIONS COMMAND

## PROCUREMENT DOCUMENTATION FOR THE FY 1998 BUDGET SUBMISSION

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## UNITED STATES SPECIAL OPERATIONS COMMAND

## PROCUREMENT DOCUMENTATION FOR THE FY 1998 BUDGET SUBMISSION

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

## Special Operations Forces

<u>\$ in Millions</u>	
FY 1999 Estimate	613.209
FY 1998 Estimate	669.166
FY 1997 Actual	514.842

PART I. PURPOSE AND SCOPE

USSOCOM is a unified command with worldwide responsibilities to train, equip and maintain Special Operations Forces (SOF) in a ready state in support of the contingency plans developed by the five regionally oriented unified commands (USEUCOM, USCENCOM, USPACOM, USACOM, and USSOUTHCOM). When directed by the President, USCINCSOC will assume command of a special operation anywhere in the world. USSOCOM's Army component forces include special forces (Green Berets), Rangers, short to medium range infiltration/exfiltration aircraft, civil affairs specialists, and psychological operations specialists. Navy component forces consist of Sea, Air, & Land (SEAL) Teams and special boat units. The Air Force component forces consist of special operation units which provide medium to long range air infiltration/exfiltration aircraft, specially equipped gunships, and aerial refueling capability. USSOCOM is the only operational command directly responsible for determining its own force structure requirement, determining the related materiel requirements, procuring the SOF unique equipment, training, and deploying its own units.

PART II. JUSTIFICATION OF FY 1998 FUNDS REQUESTEDAviation Programs

1. Rotary Wing Upgrades and Sustainment (FY 1998 - \$36.042 Million) For the MH-47E/MH-60K platform, funds procure Aircraft Survivability Equipment (ASE) hardware and software for countermeasures, power amplifier, and exhaust suppressor upgrades. Acquires Small Arms Protection System. Upgrades the Cockpit Management System and Night Vision Devices for Improved reliability and to reduce crew workload. Installs a service-common, redundant navigation system. For the MH-53J

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

### 1. Rotary Wing Upgrades and Sustainment (Cont'd)

Interactive Defensive Avionics System/Multi-Mission Advanced Tactical Terminal program, funds modify the aircraft to integrate all onboard EW equipment and adds capability to receive airborne constant source information. Also funds reliability/maintainability and safety of flight sustainment efforts.

2. SOF Training Systems (FY 1998 - \$3.352 Million) Funds will support upgrade efforts for the Special Operations Aircraft Combat Mission Simulators (SOACMS) for the MH-47E and MH-60K aircraft at Fort Campbell, KY. Upgrades include improvements to the simulator image generator to provide more realistic training and mission rehearsal and concurrency modifications.

3. MC-130H Combat Talon II (FY 1998 - \$34.656 Million) Maintains Interim Contractor Support (ICS) for APQ-170 Multi-Mode Radar, AP-102A Mission Computer, Nose Radome and Auxiliary Power Unit (APU) until organic depot-level maintenance is established. Sustains aircraft operational flight program software until depot is established. Resolves vital safety related system deficiencies to critical aircraft systems. Continues APQ-170 Radar Depot Test Program Set (TPS) acquisition initiated under the Radio Frequency Mobile Electronic Test Set (RFMETS) P-1 line item.

4. AC-130U Gunship (FY 1998 - \$55.105 Million) Funds continue interim contractor support (ICS), including intermediate and depot level repairs, spares, and annual software builds. Continue Weapon System Support as the primary means to identify engineering solutions to hardware deficiencies. Extends the APG-70 radar software development support facility to the Gunship's APQ-180 radar. Buys intermediate level peculiar support equipment for the trainable gun mount system and the 25mm gun. Continues System integration Lab (SIL) support to increase maintainability of aircraft software. Finally, continues post production support and tech order maintenance and printing.

5. C-130 Modifications (FY 1998 - \$96.592 Million) Program provides for numerous modifications to various models of the C-130 aircraft. Program is comprised of modifications generated from mission performance deficiencies, logistics problems and changes in the mission of the C-130 aircraft. Funds installation of four ALQ-172 Low Band Jammer systems on AC-130H aircraft; procures twenty-one Directional Infrared Countermeasure Systems (DIRCM); procures three lighter weight ammo

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

### 5. C-130 Modifications (Cont'd)

racks for the AC-130H weight reduction effort; funds the upfront Non-Recurring Engineering (NRE) associated with the AC-130H Low Light Level TV R&M program; procures the first two ALQ-172 Low band Jammer/ECP-93 trial install systems for AC-130U and MC-130H aircraft. Procures twelve (12) MC-130H communications navigation kits; completes MC-130H APQ-170 Radar Upgrade to the final contract compliant configuration; procures twenty-one upgraded auxiliary power units for MC-130H aircraft; procures twenty-four MC-130H underbelly protection systems.

6. OH-6 Procurement and Modifications (FY 1998 - \$7.997 Million) The H-6J McDonnell 530FF is commercially acquired and modified for Special Operations use. These aircraft are required to replace the current obsolete fleet (1968/1969) of 13 OH-6C aircraft in the Special Operations Aviation Training Company (SOATC). Funds procure five McDonnell-Douglas 530FF aircraft and modify them into AH/MH-6 helicopters. This completes the 10 aircraft purchase to replace the aging OH-6 training aircraft.

7. Aircraft Support (FY 1998 - \$3.041 Million) This program provides for various types of equipment required to support SOF aircraft. Funds provide for the procurement of ring laser gyros for the MC-130E aircraft. Also funds for replenishment of spares and the continuation of communication upgrades for the C2 aircraft.

### Shipbuilding

1. Advanced Seal Delivery System (ASDS) (FY 1998 - \$38.800 Million) The ASDS is a manned combatant submersible capable of delivering SEAL personnel and weapons in a high threat environment. Funds will construct the second ASDS, provide logistics support and conversion of one host submarine. Long lead material for future ASDS will also be procured.

2. Advanced Seal Delivery System Advance Procurement (FY98 - \$2.465 Million) Procures materiel for major subcomponents of the ASDS system such as hull material, and sonar system components and displays.



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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

3. MK 8 MOD 1 SEAL Delivery Vehicle (SDV) (FY 1998 - \$2.229 Million) Funds provide for the Service Life Extension Program effort of the MK 8 MOD 0 SDV to extend the life of this mobility platform by 15 years. The SLEP effort focuses on correcting identified and projected sustainability and maintainability problems within selected subsystems. Funds will be used to purchase/install parts for SDV SLEP and provides for logistics support. The mission of the MK 8 MOD 1 SDV is clandestine infiltration/exfiltration of SEAL combat swimmers into hostile/denied shore areas and harbor/port facilities for the conduct of special operations.
4. Submarine Conversion (FY 1998 - \$17.157) This program supports Naval Special Warfare Command's equipment and mission requirements for the execution of special operations missions as the naval component of the U.S. Special Operations Command. This conversion will provide SSN 688 class submarines as Dry Deck Shelter (DDS) host submarines to replace the decommissioning SSN 637/640 class submarines. Funds modify and install special systems on three SSN-688 Class Subs enabling each of them to host a single DDS and updates logistics support.
5. MK V Special Operations Craft (SOC) (FY 1998 - \$36.402 Million) The MK V SOC will conduct Medium Range Insertion/extraction of special operations forces. It has the inherent ability to support limited Coastal Patrol and Interdiction tasks. The MK V SOC is a high performance combatant craft capable of being transported over land and on-board C-5 aircraft on its own transporter system. Funds procure the final three operational MK V SOC detachments (six total craft and support packages).

### Ammunition Programs

1. SOF Ordnance Acquisition (FY 1998 - \$17.202 Million) The items included within this P-1 line are ordnance items that have acquisition requirements. Funds will provide pyrotechnics, demolition materials, and various munitions, ammunition, and related subsystems and equipment, in support of SOF which include special ground forces, special boat units, special warfare groups/units, Sea Air, Land (SEAL) teams, special boat squadrons, SEAL delivery vehicles and special aircraft. Funds provide better, safer fuzing mechanisms (refuze) for 40mm ammunition rounds, acquires SOF Demolition Kits providing the SOF operator greater lethality and mission flexibility. In addition, SOF has a limited capability to significantly damage large heavily

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

reinforced concrete structures assigned as targets. Penetration Augmented Munition (PAM) is a man portable, one step set up, hand emplaced munition system with increased penetration capability and greater warhead explosiveness than heavier and bulkier munitions that cannot meet SOF mission requirements. Also funds procurement of Remote Activated Munition Systems, which provide the capability to remotely control equipment such as beacons, radios, laser markers and weapons.

2. SOF Ordnance Replenishment (FY 1998 - \$33.379 Million) Funds provide individual weapons ammunition in support of the elite SOF training and mission requirements. These forces include Rangers, special boat units, special warfare groups, special warfare units, SEAL teams, special boat squadrons and SEAL delivery vehicle teams. The ammunition consists of illumination, smoke, target practice, and sub-caliber ammunition. Specifically, funds are required to procure complete rounds, and/or components requiring load and assembly, of small arms ammunition (12 gauge up to and including .50 caliber), grenades (offensive/defensive and smoke) and SOF peculiar non-standard small arms ammunition items transitioning from various SOF component programs and to conduct acceptance testing. Also supports Naval Special Forces requiring 25mm, 40mm, and 60mm caliber gun ammunition, rockets and combat acceptance testing. Provides 7.62mm and .50 caliber ammunition in support of the impending MK V SOC weapons. Procures 25mm, 40mm, and 105mm training rounds required to maintain AC-130 Gunship crew mission readiness skills. Ammunition purchases resupply reserve quantities and specified combat reserve quantities. Funds also provide for production engineering, product improvements, and gauge procurement. In addition, funds procure a variety of pyrotechnic items for Navy SOF groups, including illumination, signaling, identification and location devices. Also includes demolition materials such as explosive devices, initiators, and accessories.

#### Other Procurement

1. Maritime Equipment Modifications (FY 1998 - \$9.807 Million) Program provides for various Patrol Coastal (PC) and MK V Special Operations Craft maritime modifications and consolidates them into a single line item. Funds provide for command and control system software integration and upgrades. Funds will procure weapons/mounts and Forward Looking InfraRed (FLIR) for MK V SOCs in support of approved Pre-planned Product improvements (P3Is). Funds support procurement for Patrol Coastals, materiel and installation of stern flap modifications, installation of active noise cancellation and bridge wing controls items, and installation of propellers designed to reduce the airborne noise in the berthing compartments and meet full

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

power absorption requirements at a higher full load displacement. Finally, supports Title K alterations for emergent ship alterations.

2. Naval Special Warfare (NSW) Rigid Inflatable Boat (RIB) (FY 1998 - \$18.121M) The NSW RIB program provides a medium range surface mobility platform for SOF insertion and extraction and replaces the Special Warfare Craft (Light), or SEAFOX, which has ended its service life. The program supports the procurement of RIBs, trailers, deployment packages, on-board spares, and provides engineering support. This effort transitioned from SOF Maritime Equipment in FY 1998. Funds procurement for twenty Full-Rate Production (FRP) RIBs with trailers, prime movers, deployment packages, equipment shelters, electronics, and initial and on-board spares. Deliveries of FRP assets will commence within 12 months of ordering.
3. Spares and Repair Parts (FY 1998 - \$42.528 Million) This line item consolidates spare and repair parts funding into a single line item. The line item contains spares and repair parts funds from both aviation and shipbuilding programs. Funds reimburse the stock fund for deliveries of initial spares in support of MC-130 and AC-130 series aircraft, and various modifications. Also funds for MK V Special Operations Craft (SOC) spares, repair parts, and initial consumables that constitute operational deployment packages and major (shore based) spares "kits".
4. Communications Equipment and Electronics (FY 1998 - \$57.406 Million) Funds provide for communication systems to support SOF. This funding line consolidates SOF programs from Army, Navy, and Air Force SOF communication requirements. The SOF units' mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. Major funding requirements highlights include:
  - a. The Special Mission Radio System (SMRS) provides the materiel solution to SOF requirements for a high frequency manpack radio. Funding procures manpack radios, vehicle mounts and transportable base stations. Funding upgrades manpack radios and base stations through preplanned product improvements that provide insertions of various improved equipment components and communications security capabilities. Funding includes upgrades to fielded systems through evolutionary acquisition technology insertion.

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

### 4. Communications Equipment and Electronics (Cont'd)

- b. Provides technical post production support of the Tactical Radio Systems for Naval Special Warfare units.
  - c. Multiband/Multimission Radio (MBMMR) provides a lightweight, secure manpackable, multi-band transceiver capability. Funding procures additional manpack and vehicular MBMMRs.
  - d. The SOF Tactical Assured Connectivity Systems (SOFTACS) was formerly TACTICAL C4I. The SOFTACS program will provide significantly increased information transfer capability to deployed Special Operations Forces. The funds procure an integrated and balanced suite of communications systems designed to support high capacity, digital, secure, interoperable transmission and switching requirements.
  - e. Joint Base Station (JBS): JBS will provide SOF with continuous, reliable, long-range communications among SOF component commands while allowing for differences in missions. Funds provide initial procurement of JBS Variant 1, a small, transportable, high data rate base station that is capable of "drive on/drive off" a C-130 aircraft.
  - f. C4IA - consolidates beginning in FY98 SOF C4I automation systems to a joint C4I automation system that will provide a seamless, interoperable and easy to use automation environment for headquarters USSOCOM, component commands, and the theater SOC users to support SOF worldwide.
- Operating independently in denied areas, Special Operations Forces (SOF) units require communications equipment that will improve their warfighting capability without degrading their mobility. Therefore, SOF Communications Equipment & Electronics is a continuing effort to develop and procure unique SOF C4I requirements.
5. SOF Intelligence Systems (FY 1998 - \$21.175 Million) Funds provide various intelligence systems and equipment to support SOF Intelligence Systems. Major requirement highlights include:

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

5. SOF Intelligence Systems (Cont'd)

- a. Joint Deployable Intelligence Support System - Special Operations Command, Research, Analysis and Threat Evaluation System (JDISS-SOCRATES). Funds provide a wide range of mission directed automated intelligence and imagery support to HQ USSOCOM and components and extension to USSOCOM mission support units, Theater Special Operations Commands, and forward deployed SOF. Much of the data is acquired from national intelligence assets/data bases and tailored to SOF needs. Completes hardware and software procurement to finish network UNIX transition . Also begins evolutionary technology insertions to ensure compliance with DII COE mandates.
- b. Multi-Mission Advanced Tactical Terminal (MATT). This program allows combat forces to directly receive near-real-time operational intelligence and threat information to support mission planning and execution, enabling aircrews to effectively avoid, defeat, or destroy enemy threat systems. Funds procure aircraft modifications to accommodate MATT on the MH-53J Pave Low helicopter. Funds Joint Tactical Terminal engineering change proposals.
- c. PRIVATEER is part of an evolutionary signal intelligence system migration and acquisition program that provides a Radar and Communications Early Warning capability aboard Cyclone-Class Patrol Craft and MK V Special Operations craft.
- d. Integrated Survey Program (ISP). Program procures commercial/government off-the-shelf equipment for data collection systems. Packages will be fielded to each theater and special survey team.
- e. SOF Signal Intelligence (SIGINT) Manpack System (SSMS) is part of an evolutionary SIGINT system migration and acquisition program that provides a permanent full spectrum Communications Early Warning capability to ground, maritime, and air components of the SOF. Funds initiate evolutionary technology insertions for existing SSMS.
- f. Special Operations Forces Intelligence Vehicle (SOF-IV). Begins production engineering efforts for evolutionary technology insertions to achieve non-SCI network operational capabilities as well as achieve compliance with Defense Information Infrastructure Common Operating Environment mandates.

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

6. SOF Small Arms and Weapons (FY 1998 - \$10.269 Million) A variety of SOF small arms and weapons are procured for Rangers, special forces groups, special boat units SEAL teams and SEAL delivery vehicle teams through this budget line. Funds procure MK23 MOD 0 SOF Offensive Handgun; M4A1 Carbine, M4A1 Special Operations Peculiar Modification (SOPMOD) Accessory Kits, SOF Laser Marker (SOFLAM), SOF Personal Equipment Advanced Requirements (SPEAR), Heavy Sniper rifle (HSR), Advanced Design Night Vision Devices (NVD), Lightweight Thermal Imager (LTI).
7. SOF Maritime Equipment (FY 1998 - \$.598 Million) Funds procure necessary equipment which will enable the Naval Special Warfare Command to meet specific requirements for the execution of Special Operations and fleet support missions. As the Naval Component of U.S. Special Operations Command, these elite forces are called upon to perform difficult, life threatening missions that require modern and safe equipment. Numerous items of equipment, such as small craft, open and closed circuit scuba equipment, and mine countermeasure equipment are required for the Naval Special Warfare Command to execute their unique, special operations missions. Specifically, replaces aging/deteriorating Dry Deck Shelters (DDS) assets no longer supportable with the new commercially available components. Modifies support structure to allow installation compatibility.
8. Miscellaneous Equipment (FY 1998 - \$.5646 Million) The Miscellaneous Equipment budget line provides for various types of equipment and sustainment activities required to support SOF. The line consists of relatively low cost procurement items such as Joint Operational Stocks, equipment supporting USSOCOM headquarters management, Active Noise Reduction helmet harnesses, etc., that do not reasonably fit in other USSOCOM procurement line item categories. Funds provide: joint operational stocks currently located at the SOF Support Activity at Lexington Bluegrass Army Depot; Navy Civil Engineering Support equipment (such as vehicles and materiel handling equipment) required to support Naval SOF.
9. SOF Planning and Rehearsal System (SOFPARS) (FY 1998 - \$.568 Million) SOFPARS is an integrated family of mission planning systems, supported by extensive knowledge bases and imagery, that will be used by planners within the SOF command structure worldwide to plan and preview SOF missions. Major areas requiring automated support include data access and management, information fusion, image exploitation, mission planning and mission rehearsal (preview). SOFPARS focuses on the joint requirements to ensure interoperability and standardization of the SOF mission planning process. Funds contribute to engineering proposals to the Air Force Mission Support System and for life cycle replacement mission planning systems.

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## PROCUREMENT PROGRAM EXECUTIVE SUMMARY

10. Operational Force Enhancements (FY 1998 - \$108.339 Million) Funds are required to support Classified Special Operations Forces projects and modifications. Details of these projects are available as required.
11. PSYOP Equipment (FY 1998 - \$10.280 Million) Funds provide for acquisition of Psychological Operations (PSYOP) equipment. The intent of PSYOP is to persuade selected target audiences to support U.S. national interests and to counter misinformation directed at U.S. forces. Funds will procure Manpack, vehicle/watercraft-mounted, and aircraft-mounted systems as part of the Family of Loudspeakers. Funds also procure two Deployable Print Production Centers (DPPC), a state-of-the-art, computerized digital system capable of providing printed PSYOP products in forward locations and remote sites. Procures fifty Leaflet Delivery System (LDS) variant platforms providing both an overt and covert/ clandestine methods of leaflet dissemination. Also, procures one Special Operations Media System B (SOMS B), a rapid deployable, C-130 drive on/drive off tactical radio/TV transmission, reception and electronic news gathering system.

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PROCUREMENT PROGRAM

Date: FEBRUARY 1997

Appropriation: Procurement, Defensewide

		<u>Millions of Dollars</u>			
<u>Line No.</u>	<u>Item Nomenclature</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
<u>AVIATION PROGRAMS</u>					
42	RADIO FREQUENCY MOBILE ELECTRONIC TEST SET (RFMBETS)	16.294	14.340		
43	ROTARY WING UPGRADES AND SUSTAINMENT	9.901	5.858	36.042	56.034
44	SOF TRAINING SYSTEMS	19.496	3.874	3.352	2.667
45	MC-130H COMBAT TALON II	20.606	13.067	34.656	19.446
46	AC-130U GUNSHIP ACQUISITION	64.610	44.800	55.105	29.643
47	C-130 MODIFICATIONS	117.479	99.047	96.592	121.793
48	OH-6 PROCUREMENT AND MODIFICATIONS			7.997	
49	AIRCRAFT SUPPORT	9.620	8.639	3.041	.899
	SUBTOTAL - AVIATION	258.006	189.625	236.785	230.482
<u>SHIPBUILDING</u>					
50	PATROL COASTAL	19.520	6.000		
51	ADV SEAL DELIVERY SYSTEM			38.800	38.378
52	ADV SEAL DELIVERY SYSTEM ADVANCE PROC		4.400	2.465	2.515
53	MK8 MOD 1 SEAL DELIVERY VEHICLE (SDV)	10.958	9.255	2.229	.603

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PROCUREMENT PROGRAM

Appropriation: Procurement, Defensewide

Date: FEBRUARY 1997

Millions of Dollars

Line No.	Item Nomenclature	FY 1996	FY 1997	FY 1998	FY 1999
<u>SHIPBUILDING (Cont.)</u>					
54	SUBMARINE CONVERSION	4.617	6.027	17.157	6.136
55	SUB CONVERSION ADVANCE PROCUREMENT		2.886		
56	MKV SPECIAL OPERATIONS CRAFT	32.648	36.197	36.402	
	SUBTOTAL - SHIPBUILDING	67.743	64.765	97.053	47.632
<u>AMMUNITION PROGRAMS</u>					
57	SOF ORDNANCE ACQUISITION	18.110	13.161	17.202	15.828
58	SOF ORDNANCE REPLENISHMENT	43.749	26.417	33.379	39.617
	SUBTOTAL - AMMUNITION	61.859	39.578	50.581	55.445
<u>OTHER PROCUREMENT PROGRAMS</u>					
59	LIGHT STRIKE VEHICLE	2.000			
60	MARITIME EQUIPMENT MODIFICATIONS	8.863	10.833	9.807	34.644
61	NAVAL SPECIAL WARFARE RIGID INFLATABLE BOAT			18.121	15.986
62	SPARES AND REPAIR PARTS	31.056	36.134	42.538	26.322
63	COMMUNICATIONS EQUIPMENT AND ELECTRONICS	35.272	40.680	57.406	72.576
64	SOF INTELLIGENCE SYSTEMS	25.979	19.846	21.175	21.188
65	SOF SMALL ARMS AND WEAPONS	11.252	10.613	10.269	18.577

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PROCUREMENT PROGRAM

Date: FEBRUARY 1997

Appropriation: Procurement, Defensewide

Millions of Dollars

Line No.	Item Nomenclature	FY 1996	FY 1997	FY 1998	FY 1999
<b>OTHER PROCUREMENT PROGRAMS (Cont.)</b>					
66	SOF MARITIME EQUIPMENT	2.426	4.523	.598	2.865
67	DRUG INTERDICTION	1.500	.899		
68	ANTI-TERRORISM/COUNTER-TERRORISM		12.930	5.646	8.975
69	MISCELLANEOUS EQUIPMENT	5.018	1.876	.568	1.128
70	SOF PLANNING & REHEARSAL SYSTEM	1.086	75.221	108.339	72.472
71	OPERATIONAL FORCE ENHANCEMENTS	77.878	8.218	10.280	4.916
72	PSYOP EQUIPMENT	16.914	221.773	284.747	279.650
	SUBTOTAL - OTHER PROCUREMENT	219.244			
		606.852	515.741	669.166	613.200
<b>TOTAL PROCUREMENT</b>					

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PROCUREMENT PROGRAM - COMPARISON REPORT

Date: FEBRUARY 1997

Appropriation: Procurement, Defensewide

Budget Activity: 2

Millions of Dollars

Line No.	Item Nomenclature	Submit	FY 1996	FY 1997	FY 1998	FY 1999
<u>AVIATION PROGRAMS</u>						
42	RADIO FREQUENCY MOBILE ELECTRONIC TEST SET (RFMETS)	97APB 98PB	21.093 16.294	14.340 14.340	1.388 0	8.758 0
43	ROTARY WING UPGRADES AND SUSTAINMENT	97APB 98PB	8.415 9.901	4.788 5.858	6.106 36.042	18.803 56.034
44	SOF TRAINING SYSTEMS	97APB 98PB	21.151 19.496	1.074 3.874	.477 3.352	8.535 2.667
45	MC-130H COMBAT TALON II	97APB 98PB	20.683 20.606	8.067 13.067	5.326 34.656	3.869 19.446
46	AC-130U GUNSHIP ACQUISITION	97APB 98PB	62.216 64.610	44.800 44.800	34.696 55.105	18.694 29.643
47	C-130 MODIFICATIONS	97APB 98PB	109.800 117.479	86.677 99.047	117.011 96.592	146.820 121.793
48	OH-6 PROCUREMENT AND MODIFICATIONS	97APB 98PB	0 0	0 0	8.102 7.997	0 0
49	AIRCRAFT SUPPORT	97APB 98PB	8.067 9.620	13.639 8.639	.475 3.041	.472 .899
<u>SHIPBUILDING</u>						
50	PATROL COASTAL	97APB 98PB	19.520 19.520	0 6.000	0 0	0 0
51	ADVANCED SEAL DELIVERY SYSTEM	97APB 98PB	0 0	0 0	76.279 38.800	1.568 38.378

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PROCUREMENT PROGRAM - COMPARISON REPORT

Date: FEBRUARY 1997

Appropriation: Procurement, Defensewide

Budget Activity: 2

Millions of Dollars

Line No.	Item Nomenclature	Submit	FY 1996	FY 1997	FY 1998	FY 1999
<u>SHIPBUILDING(Cont)</u>						
52	ADVANCED SEAL DELIVERY SYSTEM ADV PROC	97APB 98PB	0 0	0 4.400	0 2.465	0 2.515
53	MK8 MOD 1 SEAL DELIVERY VEHICLE (SDV)	97APB 98PB	11.028 10.958	9.255 9.255	6.005 2.229	2.538 .603
54	SUBMARINE CONVERSION	97APB 98PB	4.647 4.647	8.913 6.027	17.188 17.157	.284 6.136
55	SUBMARINE CONVERSION ADV PROC	97APB 98PB	0 0	0 2.886	0 0	0 0
56	MKV SPECIAL OPERATIONS CRAFT	97APB 98PB	35.884 32.648	41.211 36.197	35.384 36.402	0 0
<u>AMMUNITION PROGRAMS</u>						
57	SOF ORDNANCE ACQUISITION	97APB 98PB	18.689 18.110	6.161 13.161	13.380 17.202	13.571 15.828
58	SOF ORDNANCE REPLENISHMENT	97APB 98PB	43.612 43.749	24.379 26.417	33.524 33.379	43.681 39.617
<u>OTHER PROCUREMENT PROGRAMS</u>						
59	LIGHT STRIKE VEHICLE	97APB 98PB	5.856 2.000	0 0	0 0	0 0

Page 2 of 4 Pages  
Exhibit P-1C, Procurement Program-Comparison Report

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## PROCUREMENT PROGRAM - COMPARISON REPORT

Date: FEBRUARY 1997

Appropriation: Procurement, Defensewide

Budget Activity: 2

Millions of Dollars

Line No.	Item Nomenclature	Submit	FY 1996	FY 1997	FY 1998	FY 1999
<b>OTHER PROCUREMENT PROGRAMS (Cont)</b>						
60	MARITIME EQUIPMENT MODIFICATIONS	97APB 98PB	8.492 8.863	4.833 10.833	6.136 9.807	48.051 34.644
61	NAVAL SPECIAL WARFARE RIGID INFLATABLE BOAT	97APB 98PB	0 0	0 0	0 18.121	0 15.986
62	SPARES AND REPAIR PARTS	97APB 98PB	32.867 31.056	36.134 36.134	35.091 42.538	25.392 26.322
63	COMMUNICATIONS EQUIPMENT AND ELECTRONICS	97APB 98PB	33.349 35.272	26.617 40.680	30.116 57.406	49.606 74.576
64	SOF INTELLIGENCE SYSTEMS	97APB 98PB	25.731 25.979	19.833 19.846	45.377 21.175	33.075 21.188
65	SOF SMALL ARMS AND WEAPONS	97APB 98PB	10.764 11.252	10.613 10.613	6.966 10.269	10.795 18.577
66	SOF MARITIME EQUIPMENT	97APB 98PB	6.842 2.426	5.030 4.523	8.800 .598	12.750 2.865
67	DRUG INTERDICTION	97APB 98PB	0 1.500	0 0	0 0	0 0
68	ANTI-TERRORISM/COUNTER-TERRORISM	97APB 98PB	0 0	0 .899	0 0	0 0
69	MISCELLANEOUS EQUIPMENT	97APB 98PB	5.2160 5.018	3.030 12.930	3.513 5.646	6.719 8.975

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PROCUREMENT PROGRAM - COMPARISON REPORT

Date: FEBRUARY 1997

Appropriation: Procurement, Defensewide

Budget Activity: 2

Millions of Dollars

Line No.	Item Nomenclature	Submit	FY 1996	FY 1997	FY 1998	FY 1999
<b>OTHER PROCUREMENT PROGRAMS (Cont)</b>						
70	SOF PLANNING & REHEARSAL SYSTEM	97APB 98PB	1.090 1.086	1.876 1.876	.570 .568	1.132 1.128
71	OPERATIONAL FORCE ENHANCEMENTS	97APB 98PB	78.370 77.878	75.221 75.221	125.524 108.339	101.080 72.473
72	PSYOP EQUIPMENT	97APB 98PB	19.595 16.914	7.794 8.218	7.595 10.280	4.726 4.916
	TOTAL PROCUREMENT	97APB 98PB	612.977 606.852	454.285 515.741	624.939 669.166	560.919 613.209

Page 4 of 4 Pages  
Exhibit P-1C, Procurement Program-Comparison Report

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MODIFICATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	FY's	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost To Go	Total Program
<b>C-130 MODIFICATIONS</b>												
1. AN/AAR-44 Missile Launch Warning Receiver			.765	9.413								10.178
2. APQ-170 Radar Upgrade (MC-130H)			8.888	8.146	8.058							25.092
3. ALQ-172 ECM Jammer Upgrade (AC-130H)	49,000	19,804	19,288	22,228	3,086	.700						65.106
4. AAQ-26 Forward Looking Infrared Upgrade (AC-130H/U)		8,350	9,341	18,769								36,460
5. APQ-122(V) Band Radar Update (MC-130B)	22,620	.950	9,001									9,951
6. APR-46 ICS			.980									0.980
7. Center Wing Replacement (AC-130H, HC-130P/N, MC-130B)	151,900	3,362	9,162	6,070								18,594
8. Directional Infrared Countermeasures (AC-130H/U, MC-30B/H)		5,101	40,471		51,185	68,271						165,028
9. Lifeline (AC-130U, MC-130H)	5,682	3,815	4,572			4,971						8,587
10. MC-130H Communications/Navigation Upgrade			.634	15,269	10,001							30,873
11. FY 1990 Aircraft Modification Installations (AC-130H, HC-130P/N, MC-130B)	24,499	9,920	7,000									16,920
12. MC-130H Underbelly Protection Program					1,543							1,543
13. MC-130H APU Upgrade				5,440	1,334							6,774
14. ALQ-172 Low Band Jammer Upgrade (AC-130U, MC130H)					16,157	25,034	53,940	41,237	34,642	54,132		225,142

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MODIFICATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	PYs	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost To Go	Total Program
<b>C-130 MODIFICATIONS (Cont'd)</b>												
15. F31 DIRCM (AC-130U, HC-130E, HC-130P/N, MC-130E/H)							10.226	14.788	2.985	2.994		30.993
16. AC-130H Ammo Racks Mod					1.981	2.800						4.781
17. AC-130H Armor Reconfiguration							1.292	4.173	.398			5.863
18. AC-130H Weight Reduction							5.476	.692	.398			6.566
19. AC-130H Avionics Upgrades									3.568	4.127		7.695
20. AC-130H Low Light Level TV Replacement		2.152		4.588	3.247	9.305	2.422					21.714
21. T56 Quick Engine Change Kits (AC-130H, MC-130E, HC-130P/N)						1.327	1.390	3.624	2.703	2.607		11.651
22. C-130 IR Suppression						2.758	4.912	13.595	10.424	.556		32.245
23. EC-130 Upgrades										.828		0.828
24. ALE-47 Chaff and Flare Dispenser (AC-130H/U, HC-130P/N, MC-130E/H)							8.285	9.993	9.801	2.155		30.234
25. MC-130H Air Refueling Capability												59.130
26. AC-130U F31												77.660
27. APR-46 Upgrades (AC-130H/U, MC-130E/H)						6.627	7.950	23.541	17.824	17.765		49.715
28. EW Data Bus												6.896
29. Active Noise Reduction												0.041
30. AC-130H/U Mark I		4.473	2.473					11.587	15.983	22.145		2.473
									1.393	5.503		6.896
												0.041
												2.473

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MODIFICATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	PYs	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost To Go	Total Program
<b>TOTAL FOR C-130 MODIFICATIONS</b>	258.174	55.968	110.102	89.923	96.592	121.793	95.893	139.795	118.958	140.491		969.515
<b>ROTARY WING UPGRADES AND SUSTAINMENT</b>												
1. MH-53J IDAS/MATT					16.626	22.134	4.099					42.859
2. Aircraft Survivability Equipment Countermeasures (MH-47D/E, MH- 60K/L)					1.479	1.046						2.525
3. Aircraft Survivability Equipment Engineering Fixes (MH-47D/E, MH- 60K/L)					5.907	4.089						9.996
4. MH-47 Cargo Handling System (MH- 47D/E)						1.888	2.715	1.790	1.791	1.796		9.980
5. MH-47 Exhaust Suppressor (MH- 47D/E)					1.448	4.157	4.121					9.726
6. MH-47 Rescue Hoist (MH-47D)						.208	1.081					1.289
7. Cockpit Management System 80 Upgrade (MH-47D/MH-60L)					1.045	.696	1.391	1.799				4.931
8. Embedded Global Positioning System and Inertial Navigation System (MH- 47D/E, MH-60K/L)					1.455							1.455
9. MH-60 Integrated Fuel Panel (MH- 60K/L)						3.195	1.864					5.059
10. Special Aircraft Protection Systems (MH-47D/E, MH-60K/L)					1.351	1.567						2.918
11. Mission Enhancement Little Bird (A/MH-6)					2.113	2.480						4.593

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MODIFICATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	FYa	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost To Go	Total Program
<b>ROTARY WING UPGRADES (Contd)</b>												
12. A/MH-6 Militarization						2.698						0.000
13. A/MH-6 Component Miniaturization					.790	.789	1.003					2.698
14. Aircraft Survivability Equipment Mods (MH-47/60)							4.614	3.345	5.655	23.193		2.582
15. Communications Systems Upgrades (MH-47/60)							7.602	6.817	13.890	25.730		36.807
16. A/MH-6 Modifications							1.274	1.812	1.397	.918		54.039
<b>TOTAL FOR ROTARY WING UPGRADES AND SUSTAINMENT</b>	0.000	0.000	0.000	0.000	32.214	44.947	29.764	15.563	22.733	51.637		5.401
<b>SOF ORDNANCE ACQUISITION</b>												
Singer Block I			4.787									196.838
<b>TOTAL FOR SOF ORDNANCE ACQUISITION</b>			4.787									4.787
<b>SOF INTELLIGENCE SYSTEMS</b>												
1. Multi-Mission Advanced Tactical Terminal (MATT)	15.623	0.528	5.160	9.823	2.389	1.969						19.869
2. PRIVATEER (MQ)					3.086	6.512	6.509	3.181				19.288
3. PRIVATEER (Patrol Coastal)			8.555		6.857	.606						16.018
<b>TOTAL FOR SOF INTELLIGENCE SYSTEMS</b>	15.623	0.528	13.715	9.823	12.332	9.087	6.509	3.181				55.175
<b>MARITIME EQUIP MODS</b>												
1. PC Command and Control Software Upgrades			.855	.338	1.116	1.530	.230	.259	.265	.270		4.863

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MODIFICATION SUMMARY

(TOA, Dollars in Millions)

System/Modification	FYs	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	Cost To Go	Total Program
<b>MARITIME EQUIP MODS (Contd)</b>												
2. PC Stern Flap Modification				.231	.053	.057						0.000
3. PC Active Noise Cancellation			.869	.067	.057							0.341
4. PC Bridge Wing Controls			.300	.183	.052							0.993
5. PC Threat Warning System (*Moved to SOF Intelligence Line Item beginning FY 97 (PRIVATEER))			5.133	*	*							0.535
6. PC Forward Looking Infrared Upgrade						12.213	1.269	.779	.441	.563		5.133
7. PC Propeller Upgrade			1.138	.068	.331							15.265
8. PC Self-Defense				6.000								1.537
9. PC Communication Alterations					2.827	.536	.601					6.000
10. PC Combatant Craft Retrieval System			.425	.144								3.964
11. PC Mission Dependent Modular Aft Deck								1.987	3.980	3.992		0.569
12. MK V SOC Weapons				3.607	3.781	1.236						9.959
13. MK V SOC Forward Looking Infrared					1.484	19.072						8.624
TOTAL FOR MARITIME EQUIPMENT MODIFICATIONS	0.000	0.000	8.720	10.638	9.701	34.644	2.100	3.025	4.686	4.825		20.556
TOTAL FOR ALL MODIFICATIONS	273.797	56.496	137.324	110.384	150.839	210.471	134.266	161.564	146.377	196.953	0.0	78.339
												1,578.471

UNITED STATES SPECIAL OPERATIONS COMMAND  
 PROCUREMENT-DEFENSEWIDE  
 FY 1998/FY1999 BUDGET ESTIMATES  
 COMBATING TERRORISM FUNDING SUMMARY

(DOLLARS IN MILLIONS)

FY1999

FY1998

FY1997

FY1996

ID Subactivity Description

BUDGET ACTIVITY 2: Procurement-Defensewide

P1 LINE #	Anti-Terrorism/Counter-Terrorism Classified	0.9	0	1.5	0	0.7
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TOTAL, BA 2	0	0.9	1.5	0.7
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TOTAL	0	0.9	1.5	0.7
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NOTE: ABOVE TOTALS ARE ANTI-TERRORISM FUNDING ONLY. USSOCOM'S COMBATING TERRORISM FUNDING IS INCLUDED IN SUBACTIVITY COMBAT DEVELOPMENT (CDA) AND IS PROVIDED UNDER SEPARATE COVER.



BUDGET ITEM JUSTIFICATION SHEET				DATE				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2				P-1 ITEM NOMENCLATURE RADIO FREQUENCY MOBILE ELECTRONIC TEST SET				
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions \$)	16.294	14.340						

**MISSION AND DESCRIPTION:** The Radio Frequency Mobile Electronic Test Set (RFMETS) is a program to provide Special Operations Forces (SOF) common mobile intermediate-level organic diagnostic test capability for critical avionics of the AC-130H, AC-130U and MC-130H aircraft. The RFMETS is mobile and deployable on two pallets. It detects/isolates failures in Line Replaceable Units (LRUs) at the Shop Replaceable Unit (SRU) level and certifies operational suitability of repaired LRUs. This program also provides organic depot-level repair capability for the SRUs in the LRUs for: MC-130H APQ-170 Radar; AC-130U APQ-180 Radar; APQ-102 Mission Computer; displays, communications, and control LRUs; and the AC-130H communications and display LRUs. The depot capability capitalizes Air Logistics Center (ALC) investment in depot test sets and software maintenance capabilities. It detects/isolates failed SRUs at the component level, and certifies operational suitability of repaired SRUs. Intermediate level capability acquisitions complete with FY 97 funding. This program has transferred to MC-130H Combat Talon II and AC-130U Gunship Acquisition P-1 line items.

**MISSION AND DESCRIPTION:** The Radio Frequency Mobile Electronic Test Set (RFMETS) is a program to provide Special Operations Forces (SOF) common mobile intermediate-level organic diagnostic test capability for critical avionics of the AC-130H, AC-130U and MC-130H aircraft. The RFMETS is mobile and deployable on two pallets. It detects/isolates failures in Line Replaceable Units (LRUs) at the Shop Replaceable Unit (SRU) level and certifies operational suitability of repaired LRUs. This program also provides organic depot-level repair capability for the SRUs in the LRUs for: MC-130H APQ-170 Radar; AC-130U APQ-180 Radar; APQ-102 Mission Computer; displays, communications, and control LRUs; and the AC-130H communications and display LRUs. The depot capability capitalizes Air Logistics Center (ALC) investment in depot test sets and software maintenance capabilities. It detects/isolates failed SRUs at the component level, and certifies operational suitability of repaired SRUs. Intermediate level capability acquisitions complete with FY 97 funding. This program has transferred to MC-130H Combat Talon II and AC-130U Gunship Acquisition P-1 line items.



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BUDGET ITEM JUSTIFICATION SHEET		DATE						FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE ROTARY WING UPGRADES AND SUSTAINMENT								
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	
QUANTITY										
COST (In Millions \$)	9.901	5.858	36.042	56.034	44.955	30.666	30.936	57.852		

**MISSION AND DESCRIPTION:** A requirement exists to provide aviation support to Special Operations Forces in world-wide contingency operations and low-intensity conflicts. The specialized aircraft for these missions must be capable of rapid deployment and undetected penetration of hostile areas. These aircraft must be capable of operating at extended ranges under adverse weather conditions to infiltrate, provide logistics for, reinforce, and extract Special Operations Forces. The threat is capable of sophisticated data linked systems and/or simple autonomous ground-based units with an air-to-air capability specifically targeted against rotary wing aircraft. Third world operations are apt to involve greater distances and more challenging geographical environmental conditions than the European theater. Program provides for ongoing survivability, reliability, maintainability, and operational upgrades as well as procurement appropriation sustainment cost for fielded rotary wing aircraft and subsystems. These include the A/MH-6, MH-60G/L/K, MH-53J, TH-53A, and MH-47D/E helicopters.

1. MH-47E/MH-60K. Provides for Aircraft Survivability Equipment (ASE), avionics, and aircraft systems upgrades and modifications to 11 MH-47D, 26 MH-47E, 23 MH-60K, 37 MH-60L, and 40 MH/AH-6 aircraft.

**FY 1998 PROGRAM JUSTIFICATION:** Procures hardware and software for ASE countermeasures, ASE engineering fixes (high power remote transmitter), and MH-47 exhaust suppressor upgrades. Acquires Special Aircraft Protection Systems. Upgrades the Cockpit Management System and Night Vision Devices for improved reliability and to reduce crew workload. Installs a service-common, redundant navigation system.



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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE ROTARY WING UPGRADES AND SUSTAINMENT		
<p>FY 1999 PROGRAM JUSTIFICATION: Continues the procurement of hardware and software upgrades for ASE engineering fixes and ASE countermeasures, and MH-47 exhaust suppressors. Procures upgrades to the MH-60 Fuel Panel and the MH-47 Cargo Handling System and Rescue Hoist. Continues procurement of the Special Aircraft Protection System, Cockpit Management System, and Night Vision Device upgrades.</p> <p>2. MH-53J. Interactive Defensive Avionics System/Multi-Mission Advanced Tactical Terminal program modifies the aircraft to integrate all onboard EW equipment and adds capability to receive airborne constant source information. Also funds reliability/maintainability and safety of flight sustainment efforts.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures quantity of 16 aircraft modification kits, support equipment, interim contractor support and installation of kits procured with FY97 funding.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures quantity of 11 aircraft modification kits, upgrades to training system, interim contractor support and installation of 16 kits. Funds reliability/maintainability and safety of flight sustainment modification efforts for the Infrared Detecting Set, SATCOM, Standard Flight Data Recorder, Vibration Monitoring System and cabin structure strengthening.</p> <p>3. A/MH-6. Procures airframe and aircraft systems upgrades. Mission Enhancement Little Bird (MELB) program provides structural and drive system upgrades. Miniaturization provides NDI and commercially available technology to upgrade or replace existing aircraft systems.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Provides for aircraft avionics/systems upgrades and modifications for A/MH-6 helicopters. Program will procure kits to structurally modify these helicopters to increase their maximum gross weight by 25 % (950 lbs). Miniaturization repackages existing and developing technology into smaller, light weight packages to meet available space, weight and power requirements. Procures wholesale spares.</p>			

P-1 SHOPPING LIST, ITEM NO. 43

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EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE ROTARY WING UPGRADES AND SUSTAINMENT						
FY 1999 PROGRAM JUSTIFICATION: Continues MELB and miniaturization upgrades. Modifies/militarizes the 5 MDH5-530 procured in FY 1998. Continues the procurement of wholesale spares.								
MODIFICATION SUMMARY FOR ROTARY WING AIRCRAFT								
DESCRIPTION	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
1. MH-53J IDAS/MATT			16.626	22.134	4.099			
2. Aircraft Survivability Equipment Countermeasures (MH-47D/E, MH-60K/L)			1.479	1.046				
3. Aircraft Survivability Equipment Engineering Fixes (MH-47D/E, MH-60K/L)		5.907		4.089				
4. MH-47 Cargo Handling Upgrades (MH-47D/E)				1.888	2.715	1.790	1.791	1.796
5. MH-47 Exhaust Suppressor (MH-47D/E)			1.448	4.157	4.121			
6. MH-47 Rescue Hoist (MH-47D)				.208	1.081			
7. Cockpit Management System 80 Upgrade (MH-47D/MH-60L)			1.045	.696	1.391	1.799		
8. Embedded Global Positioning System and Inertial Navigation System (MH-47D/E, MH-60K/L)			1.455					
9. MH-60 Integrated Fuel Panel (MH-60K/L)				3.195	1.864			

P-1 SHOPPING LIST, ITEM NO. 43

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Page 3 of 4 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

## FOR OFFICIAL USE ONLY

BUDGET ITEM JUSTIFICATION SHEET			DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE ROTARY WING UPGRADES AND SUSTAINMENT							
DESCRIPTION		FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
10. Small Arms Protection Systems (A/MH-6, MH-47D/E, MH-60K/L)				1.351	1.567				
11. Mission Enhancement Little Bird (A/MH-6)				2.113	2.480				
12. A/MH-6 Militarization					2.698				
13. A/MH-6 Component Miniaturization				.790	.789	1.003			
14. Aircraft Survivability Equipment Mods (MH-47/60)						4.614	3.345	5.655	23.193
15. Communications Systems Upgrades (MH-47/60)						7.602	6.817	13.890	25.730
16. A/MH-6 Modifications						1.274	1.812	1.397	.918
SUBTOTAL MODS				32.214	44.947	29.764	15.563	22.733	51.637
MH-47/60 Night Vision Devices				.946	1.790	1.491	2.484		
A/MH-6 Non-Wholesale Spares				2.882	2.942	3.005	3.071	3.143	3.221
MH-47/60 Engineering Change Proposals		6.680	5.225						
MH-53J Sustainment Efforts		1.629	.441		6.355	10.695	9.548	5.060	2.994
MH-60G Sustainment		1.592	.192						
TOTAL LINE ITEM		9.901	5.858	36.042	56.034	44.955	30.666	30.936	57.852

P-1 SHOPPING LIST, ITEM NO. 43

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Page 4 of 4 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Aviation			A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2				B. Line Item Nomenclature ROTARY WING UPGRADE/SUSTAINMENT						C. DATE: FEBRUARY 1997		
Weapon System Cost Elements (\$ thousands)	Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999				
		Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost		
1. MH-47/MH-60 Modifications/Sustainment	A														
A. Aircraft Survivability Equip (ASE)															
Countermeasures															
B. ASE Engineering Fixes													1,046		
C. Cargo Handling System													4,089		
D. Exhaust Suppressor													1,888		
E. Rescue Hoist													4,157		
F. Cockpit Management System													208		
G. Embedded Global Posn System													1,045		
H. Integrated Fuel Panel													1,455		
I. Special Aircraft Protection System													3,195		
J. Army ECP Incorporation				6,680			5,225						1,567		
K. Night Vision Devices				6,680			5,225						946		
Total MH-47/60 Sustainment													13,631		
2. MH-53J Upgrades															
A. IDAS/MATT	A												22,134		
B. MH-53J Sustainment	N/A			1,629			441						6,355		
				1,629			441						28,489		
Subtotal															
3. A/MH-6 Upgrades/Sustainment	A														
A. Mission Enhancement Little Bird													2,480		
B. A/MH-6 Militarization													2,698		
C. Component Miniaturization													789		
D. A/MH-6 Non-Wholesale Spares													2,942		
Total A/MH-6 Upgrades/Sustainment													8,909		
4. MH-60G Sustainment	A			1,592			192								
LINE ITEM TOTAL				9,901			5,858						56,034		

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: INTERACTIVE DEFENSE AVIONICS SYSTEM (IDAS)/MULTI-MISSION ADVANCED TACTICAL TERMINAL (MATT)

MODELS OF SYSTEMS AFFECTED: MH-53J

DESCRIPTION/JUSTIFICATION:

Program completes the MH-53J portion of the SOF IDAS initiative effort. This modification integrates the current stand-alone defensive system on 41 MH-53J aircraft into a Military-Standard 1553B data bus and provides electronic order of battle information via the MATT terminal, correlated to digital map data presented on a flat-panel, multi-functional color display. The integration modifies the mission processor, cockpit display units, and adds an interference blanker, digital map system, color multi-functional display, and horizontal situation indicator. The projected map display, bearing distance heading indicator and the course indicator are being removed. The designated system architecture is targeted toward modular transportability. See Procurement Line Item SOF Intell for additional FY98-03 integration and GFB funded equipment.

DATE: FEBRUARY 1997

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Restart: Feb 94; CDR: Jan95; Trial Installation: Nov 95 (Aircraft Breakout: OANG; OAFRES; 41 Active)

FINANCIAL PLAN: (\$ in millions)

FYs	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
0.8	1.2	.2									

RDT&amp;E

PROCUREMENT

Installation Kits	1	1	0.1	16	2.0	11	1.7					29	3.8
Installation Kit Nonrecurring	1.2											0	1.2
Equipment			0.5		8.0	6.2						0	14.7
Equipment Nonrecurring												0	0.0
Engineering Change Orders	2.9		1.0									0	3.9
Data	2.1		0.2									0	2.3
Support / Training Equipment			1.0		0.5	2	7.5					2	9.0
Software	10.6		2.6		.7							0	13.9
Flight Test	2.0		0.6		0.3		1.2					0	4.1
Modification of Spares												0	0.0
ICS					0.7	0.7						0	1.4

## Installation of Hardware

FYs	1											1	0.0
FY95												0	0.0
FY96			1									1	0.0
FY97												0	0.0
FY98				12	4.2							12	4.2
FY99						16	6.0					16	6.0
FY00								11	4.1			11	4.1
FY01												0	0.0
To Complete												0	0.0

Total Installation Cost

Total Procurement Cost

METHOD OF IMPLEMENTATION:

DEPOT AND DEPOT FIELD TEAM

ADMINISTRATIVE LEADTIME: 6 MONTHS

PRODUCTION LEADTIME: 12 MONTHS

CONTRACT DATE:

Current Year:

Budget Year 1: 12/97

Budget Year 2: 12/98

DELIVERY DATE:

Current Year:

Budget Year 1: 12/98

Budget Year 2: 12/99

P-1 SHOPPING LIST, ITEM NO. 43

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: INTERACTIVE DEFENSIVE AVIONICS SYSTEM/MISSION ADVANCED TACTICAL TERMINAL (IDAS/MATT)

## INSTALLATION SCHEDULE

	PY's	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	2						4	4	4	4	4	4	4	4	4	3	
Out	1		1					4	4	4	4	4	4	4	4	4	3

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														41
Out														41

**DESCRIPTION/JUSTIFICATION:** Program purchases the individual 1553 BUS compatible Aircraft Survivability Equipment components for stand alone installation. These components include Line Replaceable Units for the AVR-2A Laser Warning Detector and the ALP-47 Flare and Chaff dispensing system. This procurement includes spares.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**[illegible]

**Total Procurement Cost**

**METHOD OF IMPLEMENTATION:**

**CONTRACT DATE:**

DELIVERY DATE:

**ORGANIC**

**Current Year: N/A**

**Current Year:** N/A

## ADM

**Budget Year 1: 11/97**

**Budget Year 1: 01/98**

**MONTHS**

**Budget Year 2: 10/98**

**Budget Year 2: 01/99**

**MR:**

10/98

01/99

## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: AIRCRAFT SURVIVABILITY EQUIPMENT ENGINEERING FIXES

# MODELS OF SYSTEMS AFFECTED: MH-47D/E, MH-60K/L

**DESCRIPTION/JUSTIFICATION:** Program procures the High Power Remote Transmitter (HPRT) and installs the RADAR Jamming suites. Increased Jam to Signal ratio brought about by the HPRT will increase aircraft/aircrew survivability and mission success. This procurement includes 20% spares.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**

FINANCIAL PLAN: (\$ in millions)												
	PYs	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RD&E					1.9							0 1.9
PROCUREMENT					5.9	4.1						0 10.0

## PROCUREMENT

	.4	.3	
Installation Kits			
Install Kits Nonrecurring	.2		0 0.2
Equipment	36 4.6 24 3.1		60 7.7
Equipment Nonrecurring			0 0.0
Engineering Change Orders			0 0.0
Data			0 0.0
			0 0.0
			0 0.0
			0 0.0
			0 0.0

## Installation of Hardware

[illegible]

**Total Installation Cost**

**Total Procurement Cost**

DEPOT GOCO

Current Year: N/A

**Current Year:** N/A

**ADMINISTRATIVE LEADTIME: 3 MONTHS**

**Budget Year 1: 10/97**

[illegible]

**PRODUCTION LEADTIME: 3 MONTHS**

**Budget Year 2: 10/98**

**Budget Year 2: 01/99**

10.0

0.0

0.0

0.0

0.0

#### 4.1

59

0.0

00

22

## Requirement C

2

**P-1 SHOPPING LIST, ITEM NO. 43**

Page 1 of 2 Pages  
EXHIBIT P-3a

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: AIRCRAFT SURVIVABILITY EQUIPMENT ENGINEERING FIXES

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In						6	6	6	6	6	6	6	7				
Out						6	6	6	6	6	6	6	6	7			

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														49
Out														49

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: MH-47 CARGO HANDLING SYSTEM

**MODELS OF SYSTEMS AFFECTED: MH-47D/E**

**DESCRIPTION/JUSTIFICATION:** Program procures an enhanced cargo handling system for the MH-47 helicopter. The new system will incorporate rapid roll on/roll off capability and a dual, wenchable, triple cargo hook system. Development efforts were accomplished through an Advanced Concept Technology Demonstration.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

ATD Demo: FY98/MSIII: Oct 98

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

FY96		0	0.0
FY97		0	0.0
FY98		0	0.0
FY99		0	0.0
FY00		0	0.0
FY01		0	0.0
FY02		0	0.0
FY03		0	0.0
To Complete		0	0.0
Total Installation Cost		0	0.0

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

**DELIVERY DATE:**

## ORGANIC

**Current Year: N/A**

**Current Year: N/A**

**Budget Year 1: N/A**

**Budget Year 1: N/A**

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

**Budget Year 2: 10/98**

**Budget Year 2: 01/99**

**PRODUCTION LEADTIME: 3 MONTHS**

**10/98**

01/99 66/10

## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: MH-47 EXHAUST SUPPRESSOR

**MODELS OF SYSTEMS AFFECTED: MH-47D/E**

**DESCRIPTION/JUSTIFICATION:** Program develops, procures, and installs an enhanced exhaust suppressor to reduce the infrared signature.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**

[illegible]**Total Procurement Cost**

## METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

**DELIVERY DATE:**

DEPOT GOCO

**Current Year: N/A**

**Current Year: N/A**

**DEPOT GOCO**

**Current Year: N/A**

**Current Year: N/A**

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

Year 1: 10/97Year 1: 02/98

**PRODUCTION LEADTIME: 3 MONTHS**

10/98

01/99

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MH-47 EXHAUST SUPPRESSOR

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In							1	2	2	4	4	4	4	4	4	4	4
Out								1	2	2	4	4	4	4	4	4	4

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														37
Out	4													37

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**DESCRIPTION/JUSTIFICATION:** Program procures a rescue hoist for 11 MH-47D aircraft. The hoist is the same as the hoist on the MH-47E. This procurement includes 20% spares.

DATE: FEBRUARY 1997

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 98

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

[illegible]**Total Installation Cost**

**Total Procurement Cost**

**METHOD OF IMPLEMENTATION:**

**CONTRACT DATE:**

DELIVERY DATE:

[illegible]

Budget Year 1: N/A  
Budget Year 2: 10/98

**Budget Year 1: N/A**

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## INDIVIDUAL MODIFICATION

**MODIFICATION TITLE: COCKPIT MANAGEMENT SYSTEM 80 UPGRADE**

**MODELS OF SYSTEMS AFFECTED: MH-47D/MH-60L**

**DESCRIPTION/JUSTIFICATION:** Program upgrades and improves through partial integration the navigation and communication systems for 11 MH-47D and 36 MH-60L aircraft. These improvements will upgrade the hardware and software, while reducing pilot workload.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

[illegible]

**Total Installation Cost**

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

DELIVERY DATE:

0.0  
DEPOT GOCO

**Current Year: N/A**

**Current Year:** N/A

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

	Budget Year 1: 10/97	Budget Year 2: 10/98
--	----------------------	----------------------

**Budget Year 1: 01/98**

P-1 SHOPPING LIST, ITEM NO. 43

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EXHIBIT P-3a

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: COCKPIT MANAGEMENT SYSTEM 80 UPGRADES

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In						2	2	2	2	2	2	3	3	3	3	3	3
Out							2	2	2	2	2	2	3	3	3	3	3

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In		5	5	4										48
Out	3	4	5	5	4									48

P-1 SHOPPING LIST, ITEM NO. 43

Page 2 of 2 Pages  
EXHIBIT P-3a

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## INDIVIDUAL MODIFICATION

**MODIFICATION TITLE: EMBEDDED GLOBAL POSITIONING SYSTEM AND INERTIAL NAVIGATION SYSTEM**

**MODELS OF SYSTEMS AFFECTED: MH-47D/E, MH-60K/L**

**DESCRIPTION/JUSTIFICATION:** Program procures and installs an embedded GPS/INU (EGI) navigational unit, which will provide a redundant navigational capability. The EGI is an expandable lightweight system. This is a triservice program, which is controlled by the US Air Force.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

FY96		0	0.0
FY97		0	0.0
FY98		0	0.0
FY99		0	0.0
FY00		0	0.0
FY01		0	0.0
FY02		0	0.0
FY03		0	0.0
To Complete		0	0.0

**Total Installation Cost**

Total Procurement Cost

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

DELIVERY DATE:

**ORGANIC**

**Client Year:** N/A

**Client Year:** N/A

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

Budget Year 1: 10/97

Budget Year 1: 12/97  
Budget Year 2: 01/99

**PRODUCTION LEADTIME: 2 MONTHS**

**10/98**

01/99



**DESCRIPTION/JUSTIFICATION:** Program develops, procures, and integrates a fuel management/control system for the MH-60 aircraft. The developed system will include the management and control of internal, external and auxiliary systems. Procurement includes 20% spares.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSM: Oct 98

**FINANCIAL PLAN: (\$ in millions)**

	RD&E	PROCUREMENT	1.3	3.2	1.9	0	1.3
Installation Kits		.1	.1			0	0.2
Install Kits Nonrecurring		.1	.1			0	0.2
Equipment		45	2.7	27	1.5	72	4.2
Equipment Nonrecurring						0	0.0
Engineering Change Orders						0	0.0
Data						0	0.0
						0	0.0
						0	0.0
						0	0.0
						0	0.0

## Installation of Hardware

Amount of Inheritance					
FY96				0	0.0
FY97				0	0.0
FY98				0	0.0
FY99		34	.3	34	0.3
FY00			26	26	0.2
FY01				0	0.0
FY02				0	0.0
FY03				0	0.0
To Complete				0	0.0

**Total Installation Cost**

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

**DELIVERY DATE:**

DEPOT GOCO

**Current Year:** N/A

**Current Year:** N/A

**Budget Year 1: N/A**

**Budget Year 1: N/A**

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

**Budget Year 2: 10/98**

**Budget Year 2: 01/99**

**PRODUCTION LEADTIME: 3 MONTHS**

10/98

01/99

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MH-60 INTEGRATED FUEL PANEL

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In											10	12	12	12	12	2	
Out												10	12	12	12	12	2

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														60
Out														60



## INDIVIDUAL MODIFICATION

**MODIFICATION TITLE: MISSION ENHANCEMENT LITTLE BIRD (MELB)**

## MODELS OF SYSTEMS AFFECTED: A/MH-6

**DESCRIPTION/JUSTIFICATION:** Program develops, procures and installs a modification kit to modify the airframe, main rotor system, tail rotor system, and drive system to increase the aircraft maximum gross weight from 3920 lbs to 4700 lbs. Modification kits were procured with previous year funds. Aircraft availability for installation delayed installation until FY98.

DATE: FEBRUARY 1997

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

Amount in millions														
FY96												0	0.0	
FY97												0	0.0	
FY98			18	2.1								18	2.1	
FY99					22	2.5						22	2.5	
FY00												0	0.0	
FY01												0	0.0	
FY02												0	0.0	
FY03												0	0.0	
To Complete												0	0.0	
	0	0.0	0	0.0	18	2.1	22	2.5	0	0.0	0	0.0	40	4.6

### Total Installation Cost

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

**DELIVERY DATE:**

**DEPOT GOCO**

**Current Year:** N/A

**Current Year:** N/A

**ADMINISTRATIVE LEADTIME: 2 MONTHS      PRODUCTION LEADTIME: 3 MONTHS**

	Budget Year 1: 10/97	Budget Year 2: 10/98
1.000000	1000000	1000000
2.000000	1000000	1000000
3.000000	1000000	1000000
4.000000	1000000	1000000
5.000000	1000000	1000000
6.000000	1000000	1000000
7.000000	1000000	1000000
8.000000	1000000	1000000
9.000000	1000000	1000000
10.000000	1000000	1000000
11.000000	1000000	1000000
12.000000	1000000	1000000
13.000000	1000000	1000000
14.000000	1000000	1000000
15.000000	1000000	1000000
16.000000	1000000	1000000
17.000000	1000000	1000000
18.000000	1000000	1000000
19.000000	1000000	1000000
20.000000	1000000	1000000
21.000000	1000000	1000000
22.000000	1000000	1000000
23.000000	1000000	1000000
24.000000	1000000	1000000
25.000000	1000000	1000000
26.000000	1000000	1000000
27.000000	1000000	1000000
28.000000	1000000	1000000
29.000000	1000000	1000000
30.000000	1000000	1000000
31.000000	1000000	1000000
32.000000	1000000	1000000
33.000000	1000000	1000000
34.000000	1000000	1000000
35.000000	1000000	1000000
36.000000	1000000	1000000
37.000000	1000000	1000000
38.000000	1000000	1000000
39.000000	1000000	1000000
40.000000	1000000	1000000
41.000000	1000000	1000000
42.000000	1000000	1000000
43.000000	1000000	1000000
44.000000	1000000	1000000
45.000000	1000000	1000000
46.000000	1000000	1000000
47.000000	1000000	1000000
48.000000	1000000	1000000
49.000000	1000000	1000000
50.000000	1000000	1000000
51.000000	1000000	1000000
52.000000	1000000	1000000
53.000000	1000000	1000000
54.000000	1000000	1000000
55.000000	1000000	1000000
56.000000	1000000	1000000
57.000000	1000000	1000000
58.000000	1000000	1000000
59.000000	1000000	1000000
60.000000	1000000	1000000
61.000000	1000000	1000000
62.000000	1000000	1000000
63.000000	1000000	1000000
64.000000	1000000	1000000
65.000000	1000000	1000000
66.000000	1000000	1000000
67.000000	1000000	1000000
68.000000	1000000	1000000
69.000000	1000000	1000000
70.000000	1000000	1000000
71.000000	1000000	1000000
72.000000	1000000	1000000
73.000000	1000000	1000000
74.000000	1000000	1000000
75.000000	1000000	1000000
76.000000	1000000	1000000
77.000000	1000000	1000000
78.000000	1000000	1000000
79.000000	1000000	1000000
80.000000	1000000	1000000
81.000000	1000000	1000000
82.000000	1000000	1000000
83.000000	1000000	1000000
84.000000	1000000	1000000
85.000		

**Budget Year 1: 01/98**

**P-1 SHOPPING LIST, ITEM NO. 43**

**Page 1 of 2 Pages**  
**EXHIBIT P-3a**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MISSION ENHANCEMENT LITTLE BIRD

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In							6	6	6	6	6	6	4				
Out								6	6	6	6	6	6	4			

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														40
Out														40

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: A/MH-6 MILITARIZATION

## MODELS OF SYSTEMS AFFECTED: A/MH-6 MILITARIZATION

**DESCRIPTION/JUSTIFICATION:** Program modifies the 5 MDHS 530 Aircraft purchased in FY98 into the militarized AH-6 and MH-6 helicopters.

DATE: FEBRUARY 1997

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 98

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## PROCUREMENT

Installation Kits		.2	0	0.2
Install Kits Nonrecurring			0	0.0
Equipment		5	5	0.4
Equipment Nonrecurring			0	0.0
Engineering Change Orders			0	0.0
Data			0	0.0
			0	0.0
			0	0.0
			0	0.0
			0	0.0

## Installation of Hardware

[illegible]

**Total Installation Cost**

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:****DELIVERY DATE:**

0.0  
DEPOT GOCO

**Current Year: N/A**

**Current Year: N/A**

## 2.7 ADMINISTRATIVE

**Budget Year 1: 10/97**

**Budget Year 1: 12/97**

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

Year 1: 10/97

Year 1: 12/97

MONTHS	PRODUCTION LEADTIME:
0.0	0.0
0.0	0.0

**Budget Year 2: 10/98**

**Budget Year 2: 01/99**

**2.7 MONTHS**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: A/MH-6 MILITARIZATION

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In										2	2	1					
Out											2	2	1				

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														5
Out														5

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INDIVIDUAL MODIFICATION  
MODIFICATION TITLE: A/MH-6 COMPONENT MINIATURIZATION  
MODELS OF SYSTEMS AFFECTED: A/MH-6

DATE: FEBRUARY 1997

**DESCRIPTION/JUSTIFICATION:** Program procures Non-Developmental Items (NDI) and Commercial Off The Shelf (COTS) small, lightweight cockpit instrumentation (altitude indicator, vertical instrument displays, etc) and mission support subsystems (flight weight plans). Primary focus is on reduced pilot workload, increased safety awareness, weight reduction, and multi mission capability. This procurement includes spares.

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

MSIII: Oct 97

**FINANCIAL PLAN: (\$ in millions)**

FINANCIAL PLAN: (\$ in millions)																									
		PYs		FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		TOTAL	
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RD1&E																									
PROCUREMENT																									
Installation Kits											.8		.8		1.0									0	0.0
Install Kits Nonrecurring											.1		.1		.1									0	0.0
Equipment										14	.7	14	.7	18	.9									46	2.3
Equipment Nonrecurring																								0	0.0
Engineering Change Orders																								0	0.0
Data																								0	0.0
																								0	0.0
																								0	0.0
																								0	0.0
																								0	0.0
Installation of Hardware																									
FY96																								0	0.0
FY97																								0	0.0
FY98																								0	0.0
FY99																								0	0.0
FY00																								0	0.0
FY01																								0	0.0
FY02																								0	0.0
FY03																								0	0.0
To Complete																								0	0.0

Total Procurement Cost

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:****DELIVERY DATE:**

**ORGANIC**

**Current Year: N/A.**

**Current Year: N/A**

**ADMINISTRATIVE LEADTIME: 2 MONTHS**

Budget Year 1: 10/97

**Budget Year 1: 01/98**

**PRODUCTION LEADTIME: 3 MONTHS**

**Budget Year 2: 10/98**

**Budget Year 2: 01/99**





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BUDGET ITEM JUSTIFICATION SHEET		DATE							
		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF TRAINING SYSTEMS							

**MISSION AND DESCRIPTION:** This P-1 line funds SOF Army and Air Force ground-based trainers to support initial and continuation training and mission rehearsal. Also, funds Data Base Generating Equipment required for building and maintaining real-world training and mission rehearsal scenarios.

**FY 1998 PROGRAM JUSTIFICATION:** Funding will support upgrade efforts for the Special Operations Aviation Combat Mission Simulators (SOACMS) for the MH-47E and MH-60K aircraft at Fort Campbell, KY. Upgrades include improvements to the simulator image generator to provide more realistic training and mission rehearsal.

**FY 1999 PROGRAM JUSTIFICATION:** Continue upgrade efforts for SOACMS, focusing on software modifications to incorporate concurrency changes in the operational MH-47E/60K aircraft. Software updates will continue approximately every two years. AC-130U Gunship Aircrew/Maintenance Training System funding has been budgeted in the RDT&E account.

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SIMULATOR AND TRAINING DEVICE JUSTIFICATION (\$000)					DATE: FEBRUARY 1997		
Appropriation / P-1 Line Item Procurement, Defensewide / SOF Training Systems			Weapon System Special Operations Forces		Equipment Nomenclature AC-130U Gunship Aircrew/Maintenance Training Systems (GA/MTS)		
Fin Plan	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	Total
Quantity	1	0	0	1	0	0	0
Procurement	19,496	3,874	3,352	2,667	.071	2,438	Cont'd
RDT&E	4,441	9,759	9,564	24,777	11,359	12,907	Cont'd
O&S		1,308	3,169	3,477	4,959	5,923	Cont'd

TRAINING SYSTEM DESCRIPTION:

This project funds the AC-130U Gunship Aircrew/Maintenance Training Systems (GA/MTS); upgrades for the Special Operations Aviation Combat Mission Simulators (SOACMS), and the Satellite SOPPREP Data Base Generation System (DBGS). Supports SOF rotary wing aircraft and develops training capabilities for SOF fixed wing aircraft.

The GA/MTS develops an integrated, ground-based combination training and mission rehearsal system to support initial, mission, special qualification, continuation, upgrade and maintenance training for the AC-130U Gunship aircraft. The need for GA/MTS is driven by inadequate ground-based training or mission rehearsal capability for the aircrew and maintenance personnel. The GA/MTS will consist of two primary components. The first component, Battle Management Center (BMC) testbed, will refine requirements for system fidelity and provide an initial operational capability for the Navigator and Fire Control Officer (NAV/FCO) crew stations. The second component will complete the BMC with All Light Level Television and Forward Looking Infrared Radar sensor operator, stations, an electronic warfare officer crew station and a cockpit station with full fidelity, six degrees of freedom motion simulation for the pilots and flight engineers. Additionally, the Instructor Operator Station will provide role-playing capabilities. GA/MTS will be networked with other AFSOC mission rehearsal devices. Funding will support upgrade efforts for the SOACMS for the MH-47E and MH-60K aircraft at Fort Campbell, KY. Upgrades include improvements to the simulator image generator to provide more realistic training and mission rehearsal. Upgrades also incorporate software modifications approximately every two years to address concurrency changes made in the operational aircraft. The Satellite SOPPREP DBGS consists of a workstation (mini-DBGS) used to enhance data bases required for joint training and mission rehearsal.

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SIMULATOR AND TRAINING DEVICE JUSTIFICATION (Page 3) (\$000)							DATE: FEBRUARY 1997					
Training Device by Type AC-130U Gunship/Aircrew/Maintenance Training Systems (GA/MTS)				Weapon System Special Operations Forces								
Description/Justification: A contractor-managed, simulator-type aircrew training system which produces a qualified aircrew member. Funds procurement and deployment of an initial operational capability Battle Management Center trainer and testbed, for AC-130U aircraft. Also funds procurement of a SOFPREP Mini-Data Base Generation System (DBGS), and upgrades for Special Operations Aircraft Combat Mission Simulators and Evolutionary upgrades to all SOF Training Systems.												
Financial Plan	Prior Years		FY 1997		FY 1998		FY 1999		Cost to Complete		Total Cost	
	QTY	Cost	QTY	Cost	QTY	Cost	QTY	Cost	QTY	Cost	QTY	Cost
HARDWARE COSTS												
Device (Hardware)	1	18,152	2	2,200	1	2,843	2	2,496		Cont'd	6	Cont'd
ECOs		546		100		100		100		Cont'd		Cont'd
Nonrecurring												
GFE												
Other												Cont'd
Total Hardware Costs		18,698		2,300		2,943		2,596		0		Cont'd
SUPPORT COSTS												
Special SE (Mini-DBGS)				500								Cont'd
Integrated Log Support												
Other (Spares/Data/Misc.)		798		1,074		409		71		Cont'd		Cont'd
Total Support Costs		798		1,574		409		71		0		Cont'd
TOTAL COSTS		19,496		3,874		3,352		2,667		0		Cont'd

P-1 Shopping List Item No. 44

 EXHIBIT P-43, Page 3 of 3  
 P-43 Simulator & Training Device Justification

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BUDGET ITEM JUSTIFICATION SHEET		DATE							
		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE MC-130H COMBAT TALON II							
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	
QUANTITY									
COST (In Millions \$)	20.606	13.067	34.656	19.446	18.018	20.114	17.199	12.800	

**MISSION AND DESCRIPTION:** The Combat Talon (CT II) is a production and sustainment program in which a specialized avionics suite has been integrated into a C-130H airframe. Its mission is to conduct night, adverse weather, low-level, long-range operations in hostile, politically denied/sensitive, defended areas to infiltrate, resupply, or exfiltrate special operations forces and equipment. All 24 MC-130H aircraft have been procured in prior years. Ongoing efforts focus on meeting operational requirements in the System Operational Requirements Document by establishing organic intermediate and depot level maintenance capability on the APQ-170 Radar, nose radome, and AP-102A Mission Computer.

**FY 1998 PROGRAM JUSTIFICATION:** Maintains Interim Contractor Support (ICS) for APQ-170 Multi-Mode Radar, AP-102A Mission Computer, Nose Radome and Auxiliary Power Unit (APU) until organic depot-level maintenance capability is established. Sustains aircraft operational flight program software until depot is established. Resolves vital safety related system deficiencies to critical aircraft systems. Maintains accurate interim, safety, and operational technical order to supplement an executable time compliance technical orders (TCTOs). Provides for procurement, repair, and replacement of government furnished equipment (GFE). Continues establishment of an organic, depot-level software development, maintenance, and repair facility. Identifies vanishing vendors and obsolete parts, qualifies new source vendors and acquires replacement parts. Continues APQ-170 Radar Depot Test Program Set (TPS) acquisition initiated under the Radio Frequency Mobile Electronic Test Set (RFMETS) P-1 line item.

P-1 SHOPPING LIST, ITEM NO. 45

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Page 1 of 2 Page  
EXHIBIT P-40 Budget Item Justification Sheet

## FOR OFFICIAL USE ONLY

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE MC-130H COMBAT TALON II	FEBRUARY 1997
<p>FY 1999 PROGRAM JUSTIFICATION: Continues ICS for APQ-170 Multi-Mode Radar, Nose Radome, and APU until organic depot level maintenance capability is established. Resolves vital safety related system deficiencies to critical aircraft systems. Continues procurement, repair/replacement of GFE. Identifies vanishing vendors and obsolete parts, qualifies new source vendors and acquires replacement parts. Completes establishment of an organic, depot-level software development, maintenance, and repair facility. Sustains aircraft operational flight program software.</p>		

P-1 SHOPPING LIST, ITEM NO. 45

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 Page 2 of 2 Page  
 EXHIBIT P-40 Budget Item Justification Sheet

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Aviation		A. Appropriation/Budget Activity Title/No. Procurement/Defensewide/Proc. Just./2			FY 1996			FY 1997			FY 1998			FY 1999			DATE: FEBRUARY 1997	
Weapon System Cost Elements (\$ thousands)		Ident.	Code	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost
Engine/Accessories																		
Avionics																		
a. CFE			N/A			4,803												
b. GFE			N/A															
Service Reports/PQDRs			N/A															
Non-Recurring Costs																		
(Tooling)																		
(Other)			N/A															
Other Costs			N/A															
Subtotal Flyaway Cost						4,803						0			0			0
Deficiency Reports																		
Airframe PGSE			N/A									120			2,772			3,153
Software SE			N/A			2,659									2,648			
Avionics PGSE			N/A			9,193						1,534			12,002			
GFE Support															5,564			4,541
Publications/Tech Data			N/A												1,448			1,359
Interim Contractor Support			N/A			2,519						8,262			8,317			8,194
Other						1,432						3,151			1,905			2,199
Subtotal Support Cost						15,803						13,067			34,656			19,446
Gross P-1 End Cost						15,803						13,067						
Less: Prior Yr. Adv. Proc.																		
Net P-1 Full Funding Cost						15,803						13,067						
Plus Current Year Adv. Proc.																		
Other Non P-1 Weapon System Costs																		
Initial Spares																		
Modification Summary																		
TOTAL						20,606						13,067			34,656			19,446

P-1 SHOPPING LIST, ITEM NO. 45

Page 1 of 1 Pages  
EXHIBIT P-5, Weapon System Cost Analysis

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BUDGET ITEM JUSTIFICATION SHEET						DATE				FEBRUARY 1997			
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE AC-130U GUNSHIP											
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03				
QUANTITY													
COST (In Millions)	64.610	44.800	55.105	29.643	27.726	22.597	3.443	1.860					

**MISSION AND DESCRIPTION:** The AC-130U is a new production C-130H airframe converted to a side-firing gunship configuration with advanced sensors, weapons and a digital avionics suite that will provide enhanced operational capability and reliability over the current AC-130H. Mission equipment includes automated fire control radar that gives the AC-130U all-weather strike capability, Infrared Detection System and All Light Level Television. A Trainable Gun Mount System for the 25mm cannon gives the AC-130U dual target attack capability. Further enhancements to the AC-130U are a pressurized cabin for deployment plus inflight reconfiguration-for-firing ability. The primary mission for the AC-130U will be precision fire support for Special Operations Forces, but it has the flexibility to perform armed escort, surveillance, search and rescue, and armed reconnaissance.

**FY 1998 PROGRAM JUSTIFICATION:** Continue Interim Contractor Support (ICS), including intermediate and depot level repairs, spares, and annual software builds. Continue Weapon System Support as the primary means to identify engineering solutions to hardware deficiencies. Extends the APG-70 radar software development support facility to the Gunship's APQ-180 radar. Buy intermediate level peculiar support equipment for the trainable gun mount system and the 25mm gun. Continue System Integration Lab (SIL) support to increase maintainability of aircraft software. Continue post production support and tech order maintenance and printing.

**FY 1999 PROGRAM JUSTIFICATION:** Continue ICS for hardware and software. Continue post production support efforts and tech order maintenance and printing. Continue SIL support. Provide other post-production support as needed. Continue intermediate level peculiar support equipment test program set procurement.



BUDGET ITEM JUSTIFICATION SHEET						DATE		FEBRUARY 1997	
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE C-130 MODIFICATIONS							
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	
QUANTITY									
COST (In Millions \$)	117.479	99.047	96.592	121.793	95.893	139.795	118.958	140.491	
<p><b>MISSION AND DESCRIPTION:</b> Program provides for numerous modifications to various models of the C-130 aircraft. Program is comprised of modifications generated from mission performance deficiencies, logistics problems and changes in the mission of the C-130 aircraft.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Installs final four ALQ-172 Low Band Jammers on AC-130H aircraft; procures three lighter weight ammo racks for the AC-130H weight reduction effort; funds upfront Non-Recurring Engineering (NRE) associated with the AC-130H Low Light Level TV R&amp;M program; procures the first two trial install ALQ-172 Low Band Jammer/ECP-93 systems for AC-130U and MC-130H aircraft. Procures twelve (12) MC-130H communication/navigation kits; completes MC-130H APQ-170 Radar Upgrade to -425 specification compliant configuration; procures twenty-one upgraded auxiliary power units for MC-130H aircraft; procures twenty-four MC-130H underbelly protection systems. Procures twenty-one DIRCM systems.</p> <p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Completes ALQ-172 Low Band Jammers installation (one) on AC-130H aircraft. Procures the last four light weight ammo racks for the AC-130H and completes installation. Procures the final seven kits for the AC-130H Low Light Level TV R&amp;M program; procures the first three T-56 Quick Engine Change kits for AC/HC/MC aircraft; procures the first four IR suppression systems on MC-130 aircraft; procures two ALQ-172 Low Band Jammer/ECP-93 system for AC-130U aircraft. Begins APQ-180 Radar Upgrades, which are part of the Pre-Planned Product Improvement (P3I) to AC-130U electronic warfare and navigation systems. Procures 24 DIRCM systems. Completes procurement of MC-130H Communication/Navigation Kits (10), and installs two kits.</p>									

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE C-130 MODIFICATIONS						
MODIFICATION SUMMARY FOR C-130 AIRCRAFT								
DESCRIPTION	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
1. AN/AAR-44 Missile Launch Warning Receiver	.765	9.413						
2. APQ-170 Radar Upgrade (MC-130H)	8.888	8.146	8.058					
3. ALQ-172 Electronic CM Jammer Upgrade (AC-130H/U)	19.288	22.228	3.086	.700				
4. AAQ-26 Forward Looking Infrared System Upgrade (AC-130H/U)	9.341	18.769						
5. APQ-122(V) Band Radar Update (MC-130E)	9.001							
6. APR-46 ICS (AC-130H/U, MC-130E/H)	.980							
7. Center Wing Replacement (AC-130H, HC-130P/N, MC-130E)	9.162	6.070						
8. Directional Infrared Countermeasures (DIRCM) (AC-130H/U, MC-130E/H)	40.471		51.185	68.271				
9. Lifeline (AC-130U, MC-130H)	4.572							
10. MC-130H Communications/Navigation Upgrade	.634	15.269	10.001	4.971				
11. FY 1990 Aircraft Modification Installations (AC-130H, HC-130P/N, MC-130E)	7.000							
12. MC-130H Underbelly Protection Program			1.543					
13. MC-130H APU Upgrade		5.440	1.334					

P-1 SHOPPING LIST, ITEM NO. 47

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EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997						
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE C-130 MODIFICATIONS								
DESCRIPTION		FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	
14. ALQ-172 Low Band Jammer Upgrade/ECP-93 (AC-130U, MC-130H)				16.157	25.034	53.940	41.237	34.642	54.132	
15. P3I DIRCM (AC-130H/U, EC-130E, HC-130P/N, MC-130E/H)						10.226	14.788	2.985	2.994	
16. AC-130H Ammo Racks Modification				1.981	2.800					
17. AC-130H Armor Reconfiguration						1.292	4.173	.398		
18. AC-130H Weight Reduction						5.476	.692	.398		
19 AC-130H Avionics Upgrades								3.568	4.127	
20. AC-130H Low Light Level TV Replacement			4.588	3.247	9.305	2.422				
21. T56 Quick Engine Change Kits (AC-130H, MC-130E, HC-130)					1.327	1.390	3.624	2.703	2.607	
22. C-130 IR Suppression					2.758	4.912	13.595	10.424	.556	
23. EC-130 Upgrades									.828	
24. ALE-47 Chaff and Flare Dispenser (AC-130H/U, EC-130E, HC-130P/N, MC-130E/H)						8.285	9.993	9.801	2.155	
25. MC-130H Air Refueling Capability							23.541	17.824	17.765	
26. AC-130U P3I					6.627	7.950	16.565	18.839	27.679	

P-1 SHOPPING LIST, ITEM NO. 47

Page 3 of 4 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE							
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE C-130 MODIFICATIONS							
DESCRIPTION		FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
27. APR-46 Upgrades (AC-130H/U, MC-130E/H)							11.587	15.983	22.145
28. C-130 EW Data Bus								1.393	5.503
TOTAL MODS		110.102	89.923	96.592	121.793	95.893	139.795	118.958	140.491
PQDRS		7.377	9.124						
P-1 LINE ITEM TOTAL		117.479	99.047	96.592	121.793	95.893	139.795	118.958	140.491

P-1 SHOPPING LIST, ITEM NO. 47

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Page 4 of 4 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Aviation	A. Appropriation/Budget Activity Title/No. Procurement/Defensewide/Proc. Just./2			B. Wpn Model/Serial/Popular Name C-130 MODIFICATIONS			C. Manufacturer Name, Plant City/State Location TBD			DATE: FEBRUARY 1997		
	Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999	
		Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	Total Cost
Weapon System Cost Elements (\$ thousands)												
AIRFRAMES/CFE												
ENGINE/ACCESSORIES												
a. CFE												
b. GFE												
ECO (All Flyaway Components)												
SERVICE REPORTS/PQDRs	N/A			7,377			9,124					
OTHER COSTS & ECO												
Subtotal FLYAWAY COST				7,377			9,124			0		0
AIRFRAME PGSE												
ENGINE PGSE												
AVIONICS PGSE												
I LEVEL SUPPORT EQUIPMENT												
PUBLICATIONS/TECH. DATA												
INTERIM CONTRACTOR SUPPORT												
OTHER												
INITIAL SPARES												
Subtotal SUPPORT COST												
GROSS P-1 END COST				7,377			9,124			0		0
LESS: PRIOR YR. ADV. PROC.												
NET P-1 FULL FUNDING COST				7,377			9,124			0		0
Plus Current Year ADV. PROC.												
Other Non P-1 Weapon System Costs												
Initial Spares												
Modifications				110,102			89,923			96,592		121,793
TOTAL				117,479			99,047			96,592		121,793

P-1 SHOPPING LIST, ITEM NO. 47

Page 1 of 1 Pages  
EXHIBIT P-5, Weapon System Cost Analysis

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: APQ-170 RADAR UPGRADES

## INSTALLATION SCHEDULE

PYs	1997				1998				1999				2000			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In						7	5			5	6	6	6	6	6	3
Out	2						4	6	2		3	6	6	6	6	6

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														52
Out	5													52

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: ALQ-172 ELECTRONIC COUNTERMEASURE JAMMER UPGRADE

MODELS OF SYSTEMS AFFECTED: AC-130H

DESCRIPTION/JUSTIFICATION: Installs and modifies the ALQ-172 with low band jamming capability for all AC-130H aircraft. Also modifies the ALQ-172 with engineering change proposal-93 to provide increased memory and flightline reprogramming capability.

DATE: FEBRUARY 1997

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

PDR: Mar 95; CDR: Aug 95; 1st trial install: 1st Qtr FY96; 1st production install: 3rd Qtr FY97, (Aircraft Breakout: 0 ANG; 0 AFRES; 8 Active)

FINANCIAL PLAN: (\$ in millions)

	PY's	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty
RD&E	3.6	2.5	1.5									0
PROCUREMENT												7.6
												0
												0.0

Installation Kits	3	2.0	3	2.1	1	.7						7	4.8
Install Kits Nonrecurring	1	10.1										1	10.1
Equipment		10.8	11.4	8.0								0	30.2
Interim Contractor Support			.5	.5	1.4							0	2.4
Installed Equip. Nonrecurring		20.4										0	20.4
Data		6.8	4.9									0	11.7
Mod of Spares (BCP-93 only)			1.3	2.2								0	3.5
Support Equipment		13.2	1.4	2.6	4.3							0	21.5
Engineering Change Orders		.5	.6	1.2	5.7	.3						0	8.3
Training Equipment				.2								0	0.2

## Installation of Hardware

PY's (Procures 1st Trial Install)	1	*										1	0.0
FY95 (Procures 3 ALQ-172)			2	.8	1	.4						3	1.2
FY96 (Procures 3 ALQ-172)					3	1.2						3	1.2
FY97 (Procures 1 ALQ-172)					1	.4						1	0.4
												0	0.0
												0	0.0
												0	0.0
												0	0.0
To Complete												0	0.0

## Total Installation Cost

\* Installation cost funded under NRE.

Total Procurement Cost

METHOD OF IMPLEMENTATION:

CONTRACTOR

CONTRACT DATE:

DELIVERY DATE:

Current Year: 02/97

Current Year: 08/98

ADMINISTRATIVE LEADTIME: 9 MONTHS

Budget Year 1: N/A

Budget Year 2: N/A

PRODUCTION LEADTIME: GROUP A: 6

MONTHS; GROUP B: 18 MONTHS

Budget Year 1: N/A

Budget Year 2: N/A

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: ALQ-172 ELECTRONIC COUNTERMEASURE JAMMER UPGRADE

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	1			1	1	1	1	1	1	1							
Out	1				1	1	1	1	1	1	1						

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														8
Out														8

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: DIRECTIONAL INFRARED COUNTERMEASURES SYSTEM

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In					4	6	5	11		10		12		11			
Out						4	6	5	6	5	5	5	6	6	6	5	

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														59
Out														59

P-1 SHOPPING LIST, ITEM NO. 47

Page 2 of 2 Pages  
EXHIBIT P-3a

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MC-130H COMMUNICATIONS/NAVIGATION UPGRADE

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In											1			4	5	4	5
Out											1			3	5	4	5

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														24
Out														24





INDIVIDUAL MODIFICATION  
MODIFICATION TITLE: AMMO RACKS MOD  
MODELS OF SYSTEMS AFFECTED: AC-130H  
DESCRIPTION/JUSTIFICATION: Modification en  
Gravity (CG), future modifications are in jeopardy

DATE: FEBRUARY 1997

**DESCRIPTION/JUSTIFICATION:** Modification entails reworking the ammo racks using lighter weight material. This is one of the efforts to reduce weight in the AC-130H aircraft. Without reduction/redistribution of weight/Center of Gravity (COG), future modifications are in jeopardy.

**DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: (Aircraft Breakout: 0 ANG; 0 AFRES; 8 Active)**

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

FY96					0	0.0
FY97					0	0.0
FY98 (Procures 3 kits)					3	0.0
FY99 (Procures 4 kits)					4	0.1
FY00					0	0.0
FY01					0	0.0
FY02					0	0.0
FY03					0	0.0
To Complete					0	0.0

**Total Installation Cost**

Funds for the development and trial install of prototype.

Total Procurement Cost

**METHOD OF IMPLEMENTATION:**

**CONTRACT DATE:**

DELIVERY DATE:

**CONTRACTOR FIELD TEAM**

Current Year: N/A

**Current Year:** N/A

**ADMINISTRATIVE LEADTIME: 9 MONTHS**

**Budget Year 1: 5/98**

**Budget Year 1: 7/98**

**ADMINISTRATIVE LEADTIME: 9 MONTHS**

**Budget Year 2: 1/99**

**Budget Year 2: 6/99**

**PRODUCTION LEADTIME: 3 MONTHS**

Funds for the development and trial install of prototype.
4.7

Category	Value	Unit
Total Procurement Cost	0.0	
Administrative Lead Time	0.0	Months
Production Lead Time	0.0	Months

**METHOD OF IMPLEMENTATION:**

<b>CONTRACTOR FIELD TEAM</b>	
<b>ADMINISTRATIVE MANAGER:</b>	<b>BUDGET YEAR 2: 1/00</b>
<b>2</b>	<b>4</b>
<b>1</b>	<b>5/00</b>

**CONTRACT DATE:** N/A

**DELIVERY DATE:** N/A  
**Current Year:** 7/98  
**Budget Year 1:** 7/98  
**Budget Year 2:** 6/99

**P-1 SHOPPING LIST, ITEM NO. 47**

Page 1 of 2 Pages  
EXHIBIT P-3a

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Exhibit P-3a, Individual Modification (Continued)  
 MODIFICATION TITLE: AMMO RACKS MOD

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In			1						2	1	1	2	1				
Out				1					2	1	1	1	2				

	2001				2002				2003				To Complete		Total	
	1	2	3	4	1	2	3	4	1	2	3	4				
In															8	
Out															8	

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INDIVIDUAL MODIFICATION

MODIFICATION TITLE: LOW LIGHT LEVEL TV REPLACEMENT (LLTV)

MODELS OF SYSTEMS AFFECTED: AC-130H

DESCRIPTION/JUSTIFICATION:

This modification will improve the reliability, maintainability, supportability, and performance of the LLLTV system by modifying and/or redesigning three of its major subsystems. These subsystems are the AN/AXQ-17 camera, AN/AJQ-24C Stabilized Tracking Set, and the AN/AAQ-7 Laser Illuminator. FY95 funded an AFSOC urgent requirement for improved performance on two AC-130H aircraft.

DATE: FEBRUARY 1997

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Studies Contract Awarded: Apr 96. (Aircraft Breakout: ANG 0, AFRES 0, Active 8)

FINANCIAL PLAN: (\$ in millions)

	FY's		FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E						3.0		.3															0	3.3
PROCUREMENT																							0	0.0
Installation Kits											7	.05											7	0.1
Installation Kit Nonrecurring									1	.1													1	0.1
Equipment						1.2					7	6.0											7	7.2
Equipment Nonrecurring						.7		4.6	1	3.1													1	8.4
Modification of Spares						.03					.85	1.6											0	2.5
Engineering Change Orders											.3												0	0.3
Data											1.6												0	1.6
Training Equipment											.3	.4											0	0.7
Support Equipment											.2	.1											0	0.3
Test Range																							0	0.0
Interim Contractor Support						.27						.2											0	0.5

Installation of Hardware																								
FY's																								
FY97																								
FY98 - Procure 1st Trial Install											1	*											1	0.0
FY99 Procures 5 Kits													7	.1									7	0.1
FY00																							0	0.0
FY01																							0	0.0
FY02																							0	0.0
FY03																							0	0.0
To Complete																							0	0.0

Total Installation Cost

\* Installation cost funded under NRE.

Total Procurement Cost

METHOD OF IMPLEMENTATION:

CONTRACT DATE:

DELIVERY DATE:

P-1 SHOPPING LIST, ITEM NO. 47

CONTRACTOR FIELD TEAM

Current Year: 04/97

Current Year: VARIOUS

ADMINISTRATIVE LEADTIME: 9 MONTHS

Budget Year 1: 11/98

Budget Year 1: 11/99

PRODUCTION LEADTIME: 12 MONTHS

Budget Year 2: 11/99

Budget Year 2: 11/00

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: LOW LIGHT LEVEL TV

## INSTALLATION SCHEDULE

FYs	1997				1998				1999				2000			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In									1				1	2	2	2
Out										1				1	2	2

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														8
Out														8

P-1 SHOPPING LIST, ITEM NO. 47

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EXHIBIT P-3a

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## INDIVIDUAL MODIFICATION

**MODIFICATION KIT B: T-56 OUTICK ENGINE CHANGE (OEC) KIT UPGRADE**

MODIFICATION FILE: 1-30 Q & A MODIFICATION CHANGES (2-9-11)  
MODELS OF SYSTEMS AFFECTED: (8) AC-130H, (22) HC-130PN, (14) MC-130E

**DESCRIPTION/JUSTIFICATION:** Modifies the existing engines and QEC kits on HC-130P/N aircraft with 60/90 KVA generators and adds oil cooler augmentation on all aircraft. Without this mod, our ability to conduct operations in the high temperature environment of the Southwest is limited. Modification would standardize SOP fixed wing fleet, decrease mobility footprint, and improve reliability.

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

**(Aircraft Breakout: 0 ANG: 0 AFRES, 44 Active)**

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## RDT&amp;E

## PROCUREMENT

[illegible]

## Installation of Hardware

[illegible]

**Total Installation Cost**

Installation cost for first three trial installs funded under NRE.

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

## METHOD OF INFIELD

**CONTRACT DATE:****DELIVERY DATE:**

DEPOT

**Current Year: A7/A**

**Current Year: N/A**

DEPOT

**Budget Year 1: N/A**

May 1968

**ADMINISTRATIVE LEADTIME: 8 MONTHS**

**Budget Year 2: 02/99**

Budget Year 2: 00/00

**PRODUCTION LEADTIME: 12 MONTHS**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: T-56 QUICK ENGINE CHANGE (QEC) KIT UPGRADE

## INSTALLATION SCHEDULE

	FYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In															1	1	1
Out															1	1	1

	2001				2002				2003				To Complete		Total	
	1	2	3	4	1	2	3	4	1	2	3	4				
In		2	3	3		4	4	4		3	3	2	13		44	
Out		2	3	3		4	4	4		3	3	2	13		44	

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: AC-130U P3I (APQ-180 MOD)

## MODELS OF SYSTEMS AFFECTED: AC-130U

**DESCRIPTION/JUSTIFICATION:** This program provides for the development and procurement of modifications that correct hardware and software deficiencies for the AC-130U fleet. This specific P3I effort funds software modifications to the APQ-180 strike radar to correct problems with radar resolution, projectile impact point predictions, and real beam ground map mode. Further improvements include tracking self test capability, high resolution human factor issues, and ground moving target indicator/target track software. These phased improvements are developed as engineering change proposals to the basic system and are delivered as discrete software blocks for installation on the aircraft, trainers, and software integration lab as required.

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

IOC: 29 Mar 96: FOC: Mar 01, (Aircraft Breakout: 0 ANG; 0 AFRES; 13 Active)

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## PROCUREMENT

[illegible]

## Installation of Hardware

FY96					0	0.0
FY97					0	0.0
FY98					0	0.0
FY99			6	1.0*	6	1.0
FY00			4	.9	4	0.9
FY01					3	0.7
FY02					0	0.0
FY03					0	0.0
To Complete					0	0.0

### Total Installation Cost

• Trial install funded under NRE.

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

**DELIVERY DATE:**

**P-1 SHOPPING LIST, ITEM NO. 47**

**CONTRACTOR**

**Current Year: N/A**

**Current Year:** N/A

CONTRACTOR

**Budget Year 1: N/A**

**Budget Year 1: N/A**

**ADMINISTRATIVE LEADTIME: 4 MONTHS**

**Budget Year 2: 1/99**

**Budget Year 2: 11/99**

**PRODUCTION LEADTIME: 10 MONTHS**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: AC-130U F31 (APQ-180 MOD)

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In														1	1	2	4
Out															1	1	2

		2001				2002				2003				To Complete	Total
		1	2	3	4	1	2	3	4	1	2	3	4		
In		1	1	2		1	3								13
Out		2	1	1	2		1	3							13

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE OH-6 PROCUREMENT AND MODIFICATIONS						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY			5					
COST (in Millions \$)			7.997					
<p><b>MISSION AND DESCRIPTION:</b> The H-6J McDonnell-Douglas 530FF is commercially acquired and modified for Special Operations use. These aircraft are required to replace the current obsolete fleet (1968/1969) of 13 OH-6C aircraft in the Special Operations Aviation Training Company (SOATC). The SOATC is required to train special operations pilots in navigation skills and provide transition training for newly recruited pilots. The H-6J aircraft's low cost per flying hour provides navigational skills training cheaper than doing initial training on MH-60 aircraft. Delivery of these aircraft ensures a standard aircraft across the H-6J fleet, commonality between training and mission aircraft, and parts authorized stockage list (ASL)/prescribed load list (PLL). Parts for the OH-6C are no longer in the Army system and must be obtained through individual contracts with commercial vendors which increases cost. Overall, this procurement reduces the number of aircraft required in the SOATC from 21 Primary Aircraft Trainers (PAT) consisting of 13 OH-6C, 4 AH-6, and 4 MH-6 to 12 PAT, all MH-6s/AH-6s (10 new aircraft and 2 aircraft from existing operational fleet). Increase of ten A/MH-6J aircraft requires corresponding ten percent spares authorization due to high training operational tempo.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Five McDonnell-Douglas 530FF aircraft will be procured and modified into AH/MH-6 helicopters. This completes the 10 aircraft purchase to replace the aging OH-6 training aircraft.</p>								



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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2				C. P-1 ITEM NOMENCLATURE OH-6 PROCUREMENT & MODIFICATIONS						
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVISED AVAIL
1. OH-6 PROCUREMENT & MODIFICATIONS FY 98	5	1,170,000	MELB Ft. Eustis, VA	NOV 97	SS/FP	McDonnell Douglas Helicopter Systems Mesa, AZ	JUN 98	APR 99		
REMARKS:										

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EXHIBIT P-5A Procurement History and Planning

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BUDGET ITEM JUSTIFICATION SHEET				DATE		FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE AIRCRAFT SUPPORT						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions \$)	9.620	8.639	3.041	.899	1.903	2.412	2.426	5.440

**MISSION AND DESCRIPTION:** This program provides for various types of equipment required to support Special Operations Forces (SOF) aircraft. A more detailed description and justification of the requirements are as follows:

#### 1. ACQUISITION PROGRAMS

A. Ring Laser Gyros (RLG). This program replaces outdated Inertial Navigation Units with new RLG technology on Force Activity Designator (FAD) 1 SOF aircraft. This replacement increases the reliability of these weapon systems; reduces maintenance and support requirements; and enhances navigation and delivery capabilities.

**FY 1998 PROGRAM JUSTIFICATION:** Funding procures 28 Ring Laser Gyros (2 per aircraft) for MC-130B aircraft.

B. C-17 Special Operations Low Level (SOLL) II. This program begins the transition of the C-17 for the C-141 SOLL II aircraft. The C-141 has realized its service life and will be replaced by the C-17. As USSOCOM studies and validates its heavy lift SOLL requirements, a TBD number of C-17 aircraft will possibly receive similar type of mission avionics and sensors.

**FY 1999 PROGRAM JUSTIFICATION:** Begins procurement of initial avionics to enhance baseline C-17 capabilities for USSOCOM SOLL missions.

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE AIRCRAFT SUPPORT	FEBRUARY 1997
<p><b>2. SUSTAINMENT PROGRAMS</b></p> <p>A. United States Special Operations Command and Control (C2) EC-137 Aircraft. This is the SOF C2 aircraft modified with suitable secure communications necessary for United States Special Operations Command to perform its mission. This aircraft is responsive to contingency operations and capable of rapid, world-wide deployment. The aircraft transports personnel required for C2 operations and allows them to interface with other theater staffs. The EC-137 is a modified commercial Boeing 707 and must be kept current with applicable FAA service bulletins, airworthiness directives, safety supplemental inspection directives, and time compliance technical orders.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Funds for the continuation of communication upgrades.</p> <p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Funds for and the continuation of communication upgrades.</p>		

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 Page 2 of 2 Pages  
 EXHIBIT P-40 Budget Item Justification Sheet

[illegible]

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2			C. P-1 ITEM NOMENCLATURE AIRCRAFT SUPPORT							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF POO	REP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. ACQUISITION PROGRAMS A. RING LASER GYRO FY 98	28	91.036	OC-ALC	OCT 97	SS/FFP	Honeywell/Litton	FEB 98	APR 99	YES	
D. REMARKS:										

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Page 1 of 1 Pages  
EXHIBIT P-5A Procurement History and Planning



FEBRUARY 1997

**PAGE 1 OF 1**  
**EXHIBIT P-21**

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BUDGET ITEM JUSTIFICATION SHEET										DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2				P-1 ITEM NOMENCLATURE PATROL COASTAL							
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03			
QUANTITY	1										
COST (in Millions \$)	19.520	6.000									
<p><b>MISSION AND DESCRIPTION:</b> The Patrol Coastal (PC) will conduct coastal patrol, surveillance, and interdiction operations and will support Naval Special Warfare Missions. Each ship is equipped with two 25MM guns, one MK 38 and one MK 96 stabilized gunmount as well as M60 and .50 caliber machine guns and shoulder fired Stinger missiles. The need for a coastal patrol and interdiction combatant craft capability was validated during operation "Earnest Will" in the Persian Gulf as well as through increased commitments supporting missions in CONUS and the SOUTHCOM areas of responsibility.</p>											

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EXHIBIT P-40 Budget Item Justification Sheet



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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997						
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE ADVANCED SEAL DELIVERY SYSTEM (ASDS)								
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY			1	1	1	1	1	0		
COST (In Millions \$)			38.800	38.378	46.402	54.362	50.717	5.079		

**MISSION AND DESCRIPTION:** The Advanced SEAL Delivery System (ASDS) is a manned combatant submersible capable of delivering SEAL personnel and weapons in a high threat environment. The ASDS will provide the requisite range, endurance, payload, and other capabilities for operation in a full range of threat environments. Procurement includes funds for conversion of submarine and amphibious ship hosts for ASDS.

**FY 1998 PROGRAM JUSTIFICATION:** Constructs the second ASDS. Provides logistic support for 2nd ASDS. Conversion of one host submarine.

**FY 1999 PROGRAM JUSTIFICATION:** Constructs the third ASDS. Provides logistics for 3rd ASDS.



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BUDGET PROCUREMENT HISTORY AND PLANNING										A. DATE: FEBRUARY 1997	
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2				C. P-1 ITEM NOMENCLATURE ADVANCED SEAL DELIVERY SYSTEM (ASDS)							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL	
1. ASDS HOST SUB CONVERSION											
FY 98	1	4,536,000	NAVSEA	VAR	C/FFP	UNKNOWN	VAR	VAR	NO		
FY 99	1	4,536,000	NAVSEA	VAR	C/FFP	UNKNOWN	VAR	VAR	NO		
3. ASDs - PRODUCTION											
FY 98	1	34,264,000	NAVSEA	AUG 97	SS/FFP	Northrup Grumman, Annapollis, MD	DEC 97	DEC 99	NO		
FY 99	1	33,430,000	NAVSEA	AUG 98	SS/FFP	Northrup Grumman, Annapollis, MD	DEC 98	DEC 00	NO		
D. REMARKS: 1. Host conversion shown is MFP-11 cost only. US Navy provides approximately twice the amount shown.											
*Additional Host originally provided for in FY98 now moved to FY99 in Aug 96 re-baseline.											





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BUDGET ITEM JUSTIFICATION SHEET					DATE					FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE ADVANCED SEAL DELIVERY SYSTEM (ASDS) ADVANCED PROCUREMENT												
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03					
QUANTITY														
COST (In Millions \$)			4.400	2.465	2.515	2.590	2.668							
MISSION AND DESCRIPTION: The Advanced SEAL Delivery System (ASDS) is a manned combatant submersible capable of delivery SEAL personnel and weapons in a high threat environment. The ASDS will provide the requisite range, endurance, payload, and other capabilities for operation in a wide range of threat scenarios.														
FY 1998 PROGRAM JUSTIFICATION: Continues fabrication of follow on ASDS #3 system. Orders material for major subcomponents of the ASDS systems such as hull material, and sonar system components and displays.														
FY 1999 PROGRAM JUSTIFICATION: Continues fabrication of follow on ASDS #4 system. Orders material for major subcomponents of the ASDS systems such as hull material, and sonar system components and displays.														

P-1 SHOPPING LIST, ITEM NO. 52

UNCLASSIFIED

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WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in Thousands)						BUDGET YEAR 2 FOR FISCAL YEAR PROGRAM 1998	
Weapon System Type (Model/Series No.)						DATE:	FEBRUARY 1997
ADVANCED SEAL DELIVERY SYSTEM		FIRST SYSTEM AWARD DATE 01/98		FIRST SYSTEM COMPLETION DATE 08/00		Interval Between System Completions (Months) 6	
Advance Procurement/Advance Funding Items	Quantity	Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time In Months (Admin/Prod) - Total	Unit Cost	Total Cost	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1. CFB							
A. Hull Structure	1	01/98	01/99	12 Months	1.400	1.400	
B. Main Propulsion Motors	1	01/98	03/99	14 Months	.130	.130	
C. Maneuvering Thrusters	1	01/98	03/99	14 Months	.175	.175	
D. Mission Batteries	1	01/98	05/99	16 Months	.495	.495	
E. Integrated Control & Display(ICD)	1	01/98	05/99	16 Months	.265	.265	
2. GFB (Specify)							
3. SUBTOTAL						2.465	
4. EOQ							
5. (CFE)							
6. (GFB)							
7. SUBTOTAL							
8. DESIGN							
9. OTHER							
10. TOTAL						2.465	
NARRATIVE DESCRIPTION							
Funding is required to procure long lead time material in support of the Advanced Seal Delivery System (ASDS). This material is required in order to meet delivery schedules established in support of the Special Operations Forces ASDS #3.							

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EXHIBIT P-10, Weapon System Advance Procurement Analysis/Justification

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997						
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE MK 8 MOD I - SEAL DELIVERY VEHICLE (SDV)								
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	
QUANTITY		5	4	1						
COST (In Millions \$)		10.958	9.255	2.229	.603					

**MISSION AND DESCRIPTION:** The mission of the MK 8 Mod 1 SEAL Delivery Vehicle (SDV) is clandestine infiltration/exfiltration of SEAL combat swimmers into hostile/denied shore areas and harbor/port facilities for the conduct of special operations. The MK 8 Mod 1 SDV program is a Service Life Extension Program (SLEP) of the in-service MK 8 Mod 0 SDV to extend the life of this mobility platform by 15 years. The SLEP effort focuses on correcting identified and projected sustainability and maintainability problems within selected subsystems.

**FY 1998 PROGRAM JUSTIFICATION:** Funds will be used to procure/install engineering improvements for all six remaining SDVs including obstacle avoidance sonar, secure communications, mission data recorders, direct current propulsion motor, pilot/navigator displays, and logistics support.

**FY 1999 PROGRAM JUSTIFICATION:** Completes logistics, provides remaining technical training equipment.



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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2			C. P-1 ITEM NOMENCLATURE MK 8 MOD 1 - SEAL DELIVERY VEHICLE (SDV)							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. MK 8 MOD 1 SDV SYSTEMS										
A. SONAR - OBSTACLE AVOIDANCE										
FY 96	2	500.000	NSWC, Dhlgn		SS/FP	SONATECH Santa Barbara, CA	JAN 96	JUL 96		
	2	500.000	NSWC, Dhlgn		SS/FP	SONATECH Santa Barbara, CA	JUL 96	JAN 97	YES	
	1	500.000	NSWC, Dhlgn		SS/FP	SONATECH Santa Barbara, CA	AUG 96	MAR 97	YES	
FY 97	4	500.000	NSWC, Dhlgn		SS/FP	SONATECH Santa Barbara, CA	JAN 97	JUL 97	YES	
FY 98	1	550.000	NSWC, Dhlgn		SS/FP	SONATECH Santa Barbara, CA	JAN 98	JUL 98	YES	
B. SONAR - DOCKING										
FY 96	5	55.000	NSWC, Dhlgn		OTHER	VARIOUS	DEC 95	JUN 96		
FY 97	4	60.000	NSWC, Dhlgn		OTHER	VARIOUS	DEC 96	MAY 97	YES	
FY 98	1	65.000	NSWC, Dhlgn		OTHER	VARIOUS	DEC 97	MAY 98	YES	
C. SECURE COMMUNICATIONS - HF RADIO										
FY 96	5	31.000	NSWC, Dhlgn		SS/OTHER	HARRIS (HF) Rochester, NY	NOV 95	MAY 96		
FY 97	4	33.000	NSWC, Dhlgn		SS/OTHER	HARRIS (HF) Rochester, NY	NOV 96	MAY 97	YES	
FY 98	1	36.000	NSWC, Dhlgn		SS/OTHER	HARRIS (HF) Rochester, NY	NOV 97	MAY 98	YES	

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B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		C. P-1 ITEM NOMENCLATURE MK 8 MOD 1 - SEAL DELIVERY VEHICLE (SDV)								
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
D. SECURE COMMUNICATIONS - UHF RADIO										
FY 96	5	29.000	NSWC, Dhlgn		SS/OTHER	MAGNAVOX Ft. Wayne, IN	NOV 95	MAY 96		
FY 97	4	32.000	NSWC, Dhlgn		SS/OTHER	MAGNAVOX, Ft. Wayne, IN	NOV 96	MAY 97	YES	
FY 98	1	34.000	NSWC, Dhlgn		SS/OTHER	MAGNAVOX, Ft. Wayne, IN	NOV 97	MAY 98	YES	
E. MISSION DATA RECORDER										
FY 96 - Audio/Visual Recorder	5	2.000	NSWC, Dhlgn		SS/FP	SONY (Audio/Visual) Cranbury, NJ	NOV 95	MAY 96	YES	
Digital Recorder	5	3.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 95	MAY 96	YES	
FY 97 - Audio/Visual Recorder	4	2.500	NSWC, Dhlgn		SS/FP	SONY (Audio/Visual) Cranbury, NJ	NOV 96	MAY 97	YES	
Digital Recorder	4	3.500	NSWC, Dhlgn		OTHER	VARIOUS	NOV 96	MAY 97	YES	
FY 98 - Audio/Visual Recorder	1	2.500	NSWC, Dhlgn		SS/FP	SONY (Audio/Visual) Cranbury, NJ	NOV 97	MAY 98	YES	
Digital Recorder	1	3.500	NSWC, Dhlgn		OTHER	SONY (Audio/Visual) Cranbury, NJ	NOV 97	MAY 98	YES	
F. PROPULSION MOTOR										
FY 96	5	100.000	NSWC, Dhlgn		C/FFP	Motion Control Sys Radford, VA	NOV 95	MAY 96	YES	
FY 97	4	100.000	NSWC, Dhlgn		C/FFP	Motion Control Sys Radford, VA	NOV 96	MAY 97	YES	

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B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2			C. P-1 ITEM NOMENCLATURE MK 8 MOD 1 - SEAL DELIVERY VEHICLE (SDV)							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
F. PROPULSION MOTOR (Cont'd)  FY 98	1	110.000	NSWC, Dhlgn		SS/FFP	Motion Control Sys Radford, VA	NOV 97	MAY 98	YES	
G. DISPLAY - UNITS										
FY 96	5	170.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 95	MAY 96	YES	
FY 97	4	170.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 96	MAY 97	YES	
FY 98	1	170.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 97	MAY 98	YES	
H. DOPPLER NAVIGATION SONAR (DNS)										
FY 96	5	60.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 95	MAY 96	YES	
FY 97	4	65.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 96	MAY 97	YES	
FY 98	1	70.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 97	MAY 98	YES	
I. AUXILIARY NAVIGATION SYSTEM (ANS)										
FY 96	5	40.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 95	MAY 96	YES	
FY 97	4	45.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 96	MAY 97	YES	
FY 98	1	50.000	NSWC, Dhlgn		OTHER	VARIOUS	NOV 97	MAY 98	YES	
REMARKS: 1. For BCP's that reflect various contractors, the Coastal Systems Station will procure the piece parts via Procurement Requests (PR), assemble the unit on site, and prepare the assembly for installation during the overhaul procedure. 2. Contract Method & Type Other = PR										





BUDGET ITEM JUSTIFICATION SHEET							DATE			FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SUBMARINE CONVERSION										
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03			
QUANTITY	DDS Host Conversions	1		3	1							
COST (in Millions \$)		4.617	6.027	17.157	6.136	1.779				14,968		

**MISSION AND DESCRIPTION:** This program supports Naval Special Warfare Command's equipment and mission requirements for the execution of Special Operations missions as the Naval component of the U. S. Special Operations Command. This conversion will provide SSN 688 class submarines as Dry Deck Shelter (DDS) host submarines to replace the decommissioning SSN 637/640 class submarines. All current DDS host submarines (SSN 637/640 class) are scheduled for inactivation soon. This inactivation schedule is classified and will be provided upon request. These modifications will ensure the continued capability for clandestine, underwater SEAL and SEAL Delivery Vehicle (SDV) infiltration/exfiltration operations.

**FY 1998 PROGRAM JUSTIFICATION:** Modifies and installs special systems on three SSN-688 Class Subs enabling each of them to host a single DDS and updates logistics support.

**FY 1999 PROGRAM JUSTIFICATION:** Modifies and installs special systems on one SSN-688 Class Sub enabling it to host a single DDS and updates logistics support.



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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997					
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SUBMARINE CONVERSION ADVANCE PROCUREMENT							
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY									
COST (In Millions \$)			2.886						
<p><b>MISSION AND DESCRIPTION:</b> This program supports Submarine Conversion long-lead material procurement, needed in the support of Naval Special Warfare Command's equipment and mission requirements.</p> <p><b>FY 1997 PROGRAM JUSTIFICATION:</b> Provides long-lead time materials for one Dry Deck Shelter host submarine.</p>									

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997						
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE MK V SPECIAL OPERATIONS CRAFT								
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY	4	6	6							
COST (In Millions \$)	32.648	36.197	36.402							

**MISSION AND DESCRIPTION:** The MK V Special Operations Craft (SOC) conducts medium range insertion / extraction of Special Operations Forces (SOF). It has the inherent ability to support limited coastal patrol and interdiction taskings. The MK V SOC is a high performance combatant craft capable of being transported over land and on-board C-5 aircraft on its own transporter system. The need for this type of combatant craft was validated during operation Desert Shield and Desert Storm in the Persian Gulf and is further justified by potential maritime SOF employments in all unified areas of responsibility. The program is structured to procure, sustain and man operational systems (i.e. detachments) annually, vice individual items of equipment.

**FY 1998 PROGRAM JUSTIFICATION:** Funds will procure the final three operational MK V SOC detachments (six total craft and support packages).



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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		C. P-1 ITEM NOMENCLATURE MK V SPECIAL OPERATIONS CRAFT								
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. MK V SPECIAL OPERATIONS CRAFT SUPPORT										
A. MK V SOC										
FY 96	4	4,249,250	USSOCOM		OPTION	Halter Marine New Orleans, LA	NOV 95	AUG 96		
FY 97	6	4,190,000	USSOCOM		OPTION	Halter Marine New Orleans, LA	OCT 96	JUN 97	YES	
FY 98	6	4,516,167	USSOCOM		OPTION	Halter Marine New Orleans, LA	OCT 97	JUN 98		
B. TRANSPORTER										
FY 96	4	900,000	USSOCOM		OPTION	Halter Marine New Orleans, LA	NOV 95	AUG 96		
FY 97	6	790,500	USSOCOM		OPTION	Halter Marine New Orleans, LA	OCT 96	JUN 97	YES	
FY 98	6	820,000	USSOCOM		OPTION	Halter Marine New Orleans, LA	OCT 97	JUN 98		
C. HEAVY SUPPORT VEHICLE (M1083)										
FY 96	4	162,500	Army, TACOM		OPTION	Stewart/STVSO	OCT 95	JUN 96		
FY 97	5	190,000	Army, TACOM		OPTION	Stewart/STVSO	JAN 97	APR 97	YES	
FY 98	6	162,667	Army, TACOM		OPTION	Stewart/STVSO	OCT 97	APR 98		
D. LIGHT SUPPORT VEHICLE (M1097)										
FY 96	8	66,250	Army, TACOM		OPTION	AM General	OCT 95	APR 96		
FY 97	12	66,667	Army, TACOM		OPTION	AM General	DEC 96	APR 97	YES	
FY 98	12	68,833	Army, TACOM		OPTION	AM General	OCT 97	APR 98		

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		C. P-1 ITEM NOMENCLATURE MK V SPECIAL OPERATIONS CRAFT								
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. MK V SPECIAL OPERATIONS CRAFT SUPPORT										
E. S-250 SHELTER										
FY 96	8	15.000	USSOCOM		PO	Ramin Engr Works	MAR 96	JUN 96		
FY 97	12	14.333	USSOCOM		PO	Ramin Engr Works	OCT 96	JAN 97	YES	
FY 98	12	15.750	USSOCOM		PO	Ramin Engr Works	OCT 97	JAN 98		
F. ISU-90 SHELTER										
FY 96	2	35.000	USSOCOM		PO	AAR Cadillac Mfg	MAR 96	APR 96		
FY 97	3	38.000	USSOCOM		PO	AAR Cadillac Mfg	OCT 96	JAN 97	YES	
FY 98	3	35.000	USSOCOM		PO	AAR Cadillac Mfg	OCT 97	JAN 98		
H. TRACTOR (M916A1E1)										
FY 96	10	205.000	Army, TACOM		OPTION	Freightliner	OCT 95	AUG 96		
FY 97	7	117.143	Army, TACOM		OPTION	Freightliner	DEC 96	JUN 97	YES	
I. BASIC COMMUNICATIONS										
FY 96	10	640.100	USSOCOM		C/FP	VARIOUS	OCT 95	JUN 96		
FY 97	6	325.000	USSOCOM		C/FP	VARIOUS	OCT 96	MAY 97	YES	
REMARKS:										

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BUDGET ITEM JUSTIFICATION SHEET										DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2					P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION						
	FY96		FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY											
COST (In Millions \$)	18.110	13.161	17.202	15.828	9.185	8.928	9.574	12.594			

**MISSION AND DESCRIPTION:** The items included within this P-1 line are ordnance items that have acquisition requirements. This program provides a variety of items developed and modified for Special Operations Forces (SOF).

1. Selectable Lightweight Attack Munition (SLAM). SLAM is a 2.2 pound hand emplaced munition of various detonation methods capable of defeating tracked/wheeled vehicles, POL/ammunition storage sites and parked aircraft at a standoff distance. SLAM replaces heavier and bulkier munitions that are often not suitable to meet SOF mission requirements.

2. SOF Demolition Kit. This kit consists of inert hardware sets for Explosively Formed Penetrators (EFPs), conical shape charges, and linear shaped charges along with tools, equipment, and attaching devices for constructing and emplacing a variety of demolition charges. The kit allows the SOF operator to tailor the demolition charges to the target providing greater lethality and mission flexibility.

**FY 1998 PROGRAM JUSTIFICATION:** This procurement is a direct result of a development effort by SOF and acquires demolition kit items to meet the inventory objective for war reserve and training.

**FY 1999 PROGRAM JUSTIFICATION:** This is a continuing effort to procure demolition kit items to meet the inventory objective for war reserve and training.

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION		
<p>3. Time Delay Firing Device (TDFD). The TDFD is an improved firing device which replaces the outdated six versions of the M1 firing device.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures TDFDs to meet the inventory objective for war reserve and training.</p> <p>4. 40mm Refuze. This program provides a more effective 40mm round of ammunition to successfully engage and defeat personnel and lightly armored targets. Moreover, this 40mm round satisfies an urgent safety requirement to replace the current MK-27 fuze which has been prone to failure over the past 40 years, and when attached to improved, more lethal projectiles, becomes a safety hazard to the gunship and its crew.</p> <p>FY 1998 PROGRAM JUSTIFICATION: This is a continuing effort to replace the unsafe fuze in the 40mm inventory. Funding procures approximately 147,000 fuzes.</p> <p>FY 1999 PROGRAM JUSTIFICATION: This continuing procurement will complete inventory replacement of unsafe 40mm fuzes.</p> <p>5. Remote Activated Munitions System (RAMS) - RAMS provides a capability to remotely control detonation of demolition charges or the remote operation of other items of equipment such as beacons, laser markers, radios, and weapons.</p> <p>FY 1998 PROGRAM JUSTIFICATION: This procurement is a direct result of a development effort by SOF and it is a continuing effort to meet the inventory objective.</p> <p>FY 1999 PROGRAM JUSTIFICATION: This procurement continues the effort to acquire systems to meet the inventory objective.</p>		

P-1 SHOPPING LIST, ITEM NO. 57

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EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION		
<p>6. Stinger Modification. Procures hardware and software modifications to improve Stinger missile performance against aerial targets which are slow moving, employing advanced countermeasures, or operating at night. These modifications will also improve performance against slow moving surface craft that are operating day or night. The modifications will maintain compatibility with all current and planned command and launch platforms including the gripstock used for the Patrol Coastal Man-Portable Air Defense (MANPAD) launching of missiles. The Stinger missile is the Navy SOF Patrol Coastal Ship class's primary weapon and they are also employed by Navy SEAL teams and the SEAL delivery vehicle teams.</p> <p>7. LIMPET. Provides Sea, Air, and Land (SEAL) units the LIMPET Assembly Module (LAM) MK-5, Practice LIMPET Assembly Module (PLAM) MK-6, and Engineering Change Proposals (ECP) for LAM MK-5/PLAM MK-6.</p> <p>8. Penetration Augmented Munition (PAM). Presently SOF has a limited capability to significantly damage large heavily reinforced concrete structures assigned as targets. PAM is a man portable, one step set up, hand emplaced munition system with increased penetration capability and greater warhead explosiveness than heavier and bulkier munitions that can not meet SOF mission requirements. For specified targets a 35 pound PAM replaces 200 pounds of C4 explosive and greatly reduces time on target. PAM represents new capability for SOF by being the first hand emplaced munition to use tandem Explosively Formed Penetrators (EFPs) and in-line electronic fuzing.</p> <p>FY 1998 PROGRAM JUSTIFICATION: This procurement is a direct result of a development effort by SOF and begins to acquire PAMs to meet the inventory objective for war reserve and training.</p> <p>FY 1999 PROGRAM JUSTIFICATION: This is a continuing effort to procure PAMs to meet the inventory objective for war reserve and training.</p>		

P-1 SHOPPING LIST, ITEM NO. 57

Page 3 of 4 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

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**APPROPRIATION / BUDGET ACTIVITY  
PROCUREMENT, DEFENSEWIDE / 2**

## P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION

9. IMP 105. The 105mm high fragmentation round is designed to optimize fragments for personnel and light materiel targets while minimizing collateral damage and danger at close distances. The 105mm guided projectile is required to improve first shot kill capabilities for hardened mobile and stationary targets while minimizing collateral damage.

10. EX-51. The EX-51 is an anti-disturbance device employed by SOF operators to prevent removal of tactically emplaced explosive charge assemblies.

11. Improved Limpet Assembly Modular (ILAM). The ILAM is required for SEAL delivery vehicle attacks against ships, submarines, nested patrol craft, submerged harbor facilities and various other maritime targets. The ILAM will allow greater explosive weight to be delivered to the target, decreased time on target by improving handling procedures, and result in an enhanced probability of mission success.

## MODIFICATION SUMMARY FOR SOF ORDNANCE ACQUISITION

**DESCRIPTION**

FY 96

FY 97

FY 98FY 99FY 00FY 01FY 02FY 03

## Stinger Block I

**4.787**

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION	A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDINANCE ACQUISITION				C. DATE: FEBRUARY 1997			
	Ident. Code	FY 1996		Total Cost	FY 1997		Total Cost	Unit Cost	FY 1998		Unit Cost	QTY
		Unit Cost	QTY		Unit Cost	QTY			Unit Cost	QTY		
Weapon System Cost Elements (\$ thousands)												
1. SELECTABLE LT WT ATTACK MUNITION	A											
A. Hardware		0.931	6,232	5,804	0.800	3,750	3,000					
2. SOF DEMOLITION KIT	A											
A. Hardware									1,506	VAR		2,066
3. TIME DELAY FIRING DEVICE (TDFFD)	A											
A. Trainers		1.154	260	300								
B. Tactical Units		0.595	1,080	643	0.800	5,000	4,000	0.796	3,000	2,389		
4. 40MM FOU9 A/B REFUZE	A											
A. Hardware		0.026	251,000	6,426	0.028	117,000	3,284	0.029	147,000	4,287	0.030	141,000
5. REMOTE ACTIVATED MUNITIONS SYS	A											
A. Transmitters			VAR	150	5.000	100	500	5.000	300	1,500	5.000	100
B. Receivers					0.937	700	656	0.921	3,300	3,038	0.911	4,500
6. STINGER MODIFICATION	A											
A. Hardware		31.913	150	4,787								
7. LIMPET	A											
A. Hardware						VAR	671					
8. PENETRATION AUGMENTED MUNITION	A											
A. Hardware									11,205	400	9,894	500
9. 105MM HIGH FRAGMENTATION ROUND	A											
A. Hardware						VAR	1,050					
LINE ITEM TOTAL				18,110			13,161				17,202	
												15,828

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LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCS	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
1. SELECTABLE LIGHTWEIGHT ATTACK MUNITION										
A. Hardware										
FY 96	6,232	.931	ARDEC		OPTION- Priced	Alliant Tech Systems Hopkins, Mn	AUG 96	OCT 97	YES	
FY 97	3,750	.800	ARDEC		OPTION- Priced	Alliant Tech Systems Hopkins, Mn	MAR 97	OCT 98	YES	
3. TIME DELAY FIRING DEVICE (TDED)										
A. Tracked										
FY 96	260	1.154	ARDEC		OPTION- Priced	AAI Hunt Valley, MD	FEB 96	JAN 97	YES	
B. Tactical										
FY 96	1,080	.595	ARDEC		OPTION- Priced	AAI Hunt Valley, MD	FEB 96	JAN 97	YES	
FY 97	5,000	.800	ARDEC		OPTION- Unpriced	AAI Hunt Valley, MD	MAR 97	APR 98	YES	
FY 98	3,000	.796	ARDEC	NOV 97	C/FP	TBD	JUN 98	JAN 00	YES	
4. 40MM PGU9 A/B REFUSE										
A. Hardware										
FY 96	251,000	.026	Eglin AFB, FL		OPTION/FP	Alliant Tech Systems Hopkins, MN	JUN 96	MAY 97	YES	
FY 97	117,000	.028	Eglin AFB, FL		OPTION/FP	Alliant Tech Systems Hopkins, MN	FEB 97	MAY 98	YES	
FY 98	147,000	.029	Eglin AFB, FL		OPTION/FP	Alliant Tech Systems Hopkins, MN	NOV 97	MAY 99	YES	

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B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE SOF ORDNANCE ACQUISITION			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCS	REP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
FY 99	141,000	.030	Eglin AFB, FL		OPTION/FP	Alliant Tech Systems Hopkins, MN	NOV 98	MAY 00	YES	
5. REMOTE ACTIVATED MUNITIONS SYSTEMS										
A. Transmitters										
FY 97	100	5.000	ARDEC	N/A	MIPR	NAWC, Indianapolis, In	JUN 97	MAR 99	NO	
FY 98	300	5.000	ARDEC	NOV 97	C/FP	TBD	JUN 98	JAN 00	NO	
FY 99	100	5.000	ARDEC	NOV 98	C/FP	TBD	JUN 99	JAN 01	NO	
B. Receivers										
FY 97	700	.937	ARDEC	N/A	MIPR	NAWC, Indianapolis, IN	JUN 97	MAR 99	NO	
FY 98	3,300	.921	ARDEC	NOV 97	C/FP	TBD	JUN 98	JAN 00	NO	
FY 99	4,500	.911	ARDEC	NOV 98	C/FP	TBD	JUN 99	JAN 01	NO	
6. STINGER MISSILE MODIFICATIONS										
FY 96	150	31.913	Army-FAD		OPTION Priced	Hughes Aircraft Tucson, AZ	MAR 96	JAN 98	YES	
8. PENETRATION AUGMENTED MUNITION										
A. Hardware										
FY 98	400	11.205	ARDEC	N/A	SS	Alliant Tech Systems Hopkins, MD	OCT 97	SEP 98	NO	
FY 99	500	9.894	ARDEC	N/A	SS	Alliant Tech Systems Hopkins, MN	OCT 98	OCT 99	NO	



**EXHIBIT P-21**

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BUDGET ITEM JUSTIFICATION SHEET		DATE							
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF ORDNANCE REPLENISHMENT							

**MISSION AND DESCRIPTION:** This program provides ammunition for Special Operations Forces (SOF) components for required training and war reserve stock. The required funding will allow SOF components to accomplish the required annual training and maintain the building of the Defense Planning Guidance required combat reserve quantities.

1. Small Arms/Landing Party Ammunition. Provides SOF small arms replenishment ammunition (12 gauge up to .50 Cal) and grenades (offensive and smoke) to support Naval Operations Forces resupply of peacetime expenditures, and specified combat reserve requirements. The Navy Special Operations Forces are comprised of the following subordinate elements: Special Warfare Groups, Special Warfare Units, Sea Air Land (SEAL) Teams, SEAL Delivery Vehicle Teams, Special Boat Squadrons, Special Boat Units and Naval Special Warfare (NSW) Patrol Coastal Ships.

**FY 1998 PROGRAM JUSTIFICATION:** Funds are required to procure complete rounds, and/or components requiring load and assembly, of small arms ammunition, grenades (offensive/defensive and smoke), ammunition types transitioned from various SOF component programs and production support costs. Ammunition is required to support resupply of peacetime expenditures and specified combat ready reserve quantity. Additional funding provides for all production support costs.

**FY 1999 PROGRAM JUSTIFICATION:** Funds are required for continued procurement and support of replenishment small arms ammunition to support Navy SOF components.

2. Other Ship Gun Munitions. Provides replenishment ammunition in support of Naval Special Operations Forces which include medium caliber gun

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE SOF ORDNANCE REPLENISHMENT		
ammunition (25mm and above), rockets, and production support costs.		
FY 1998 PROGRAM JUSTIFICATION: Funds are required to support Naval SOF components with load and assembly, complete rounds of medium caliber replenishment ammunition including 25mm, 40mm, rockets and production support costs. This ammunition supports peacetime expenditure consisting of re-supply and specified combat reserve quantities.		
FY 1999 PROGRAM JUSTIFICATION: Funds are required for continued support of other ship gun replenishment ammunition to support SOF components.		
3. MK V Special Operations Craft (SOC) Ammunition. Provides ammunition in support of the weapons pre-planned product improvement (P3I) for the MK V SOC. The P3I weapons suite includes 25mm, 7.62mm, GAU-17, and twin .50 caliber machine guns. In addition, the MK V SOC will employ Stinger missiles in a manpack configuration utilizing Beltpack Identification Friend or Foe system and AN-PAS-18 Night Sight during night operations.		
FY 1998 PROGRAM JUSTIFICATION: Funds are required to procure components, load and assemble 25mm ammunition rounds and support the MK V SOC. This ammunition supports peacetime expenditure consisting of re-supply and specified combat reserve quantities.		
FY 1999 PROGRAM JUSTIFICATION: Funds are required for continued procurement and support of replenishment minor caliber ammunition to support the MK V SOC.		
4. Navy Pyro/Demo. This program provides pyrotechnic items and demolition material to support Naval Special Operations Forces' peacetime expenditures, resupply, and specified combat reserve requirements. The Navy Special Operations Forces are comprised of the following subordinate elements: special warfare groups, special warfare units, SEAL teams, SEAL delivery vehicle teams, special boat squadrons, special boat units and the Naval special warfare patrol coastal ships.		
FY 1998 PROGRAM JUSTIFICATION: Funds are required for the procurement of a variety of pyrotechnic items consisting of illumination, signalling, identification, and location devices using glare or smoke as the primary signalling agent, as well as demolition material consisting of explosive devices,		

P-1 SHOPPING LIST, ITEM NO. 58

Page 2 of 3 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF ORDNANCE REPLENISHMENT	FEBRUARY 1997
<p>initiators and accessories. This procurement is required to provide replenishment Pyro/Demo items to support Navy SOF peacetime expenditure, resupply and specified combat reserve quantities.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Funds are required for continued procurement and support of replenishment items for the Navy Pyro/Demo P-1 Line.</p> <p>5. Air Force Special Operations Command (AFSOC) Training Munitions. Provides 25mm, 40mm, and 105mm training rounds required to maintain AC-130 Gunship crew mission readiness skills. Quantities vary depending upon training requirements.</p> <p>FY 1998 PROGRAM JUSTIFICATION: The ammunition is required to maintain proficiency by the crews of the AC-130 Gunship. This highly versatile weapon system is dependent on its well trained crews. Funds are required for continued support of replenishment ammunition for training crews on the AC-130 Gunship.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Funds are required for continued support of replenishment ammunition for training crews on the AC-130 Gunship.</p> <p>6. AFSOC 25mm War Reserve Munitions. Provides the new PGU-38 round required war reserve stock for the AC-130 Gunship.</p> <p>7. LIMPET. The LIMPET program consists of modifications to three underwater mines, MK4, MK5 and MK6.</p> <p>The P-20 and P-22 are classified and can be submitted upon request.</p>		

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION			A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2			B. Line Item Nomenclature SOF ORDNANCE REPLACEMENT						C. DATE: FEBRUARY 1997			
Weapon System Cost Elements \$ (thousands)			Ident. Code	FY 1996		FY 1997			FY 1998			FY 1999			
				Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost
1. SMALL ARMS/LANDING PARTY AMMO															
HARDWARE															
A. Shotgun Cartridges (All Types)			A												
CTG 12 Gauge No 00								200,000	64						
CTG 12 Gauge No 9														300,000	57
CTG 12 Dummy											6,000	5			
Subtotal						0			64			5			57
B. 5.56mm Cartridges (All Types)			A												
Ball M855								2,468,700	889		4,348,800		3,818,500		1,091
Ball and Tracer								2,312,500	1,110						
CTG Dummy M19											6,000	4			
Blank								1,163,000	244		1,000,500	210		1,050,000	231
CTG Frangible											500,000	300			
Subtotal						0			2,243			1,722			1,322
C. 7.62mm Cartridges (All Types)			A												
CHG Ball Intermediate														100,000	41
CHG Blank M82 Linked								1,500,000	780		500,000	230		1,048,400	492
CHG Linked Ball and Tracer														2,500,000	1,525
CHG M80 Linked W/O Tracer					544,800	360					3,500,000	1,890			
CHG Dummy Linked								746,428	627		6,000	10			
CHG Dummy M72 Single											6,000	7			
CHG Ball Lrd Dim Tracer													2,000,000	1140	
CHG Sniper													334,000	244	
CHG M3 Training W/Simulator					125,000	875					125,000	938			
Subtotal						1,235			1,407			3,075			3,442
D. 9mm Cartridges (All Types)			A												
Ball					3,272,250	506					3,500,000	525		5,000,000	750
Sim 5.56														900,000	405

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION		A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDNANCE REPLENISHMENT						C. DATE: FEBRUARY 1997		
Weapon System Cost Elements \$ (thousands)		Ident. Code	FY 1996		FY 1997		FY 1998		FY 1999					
			Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost
CHG Frangible					506			0			300			
Subtotal											825			1,155
E. .38 Cal Cartridges (All Types)		A												
CTG .357 Cal FMJ					0						0		107,900	25
Subtotal														25
F. .45 Cal Cartridges (All Types)		A												
CTG Ball M1911 Match				2,327,465	465						500,000		3,300,000	660
CTG Frangible					465			0			300			
Subtotal					465						300			660
G. .50 Cal Cartridges (All Types)		A												
CTG Sniper MK211				66,128	574						350,000		665	
CTG Linked Ball MG											272,400		967	
CTG Dim Tracer					574			0			1,632		500,000	1,835
Subtotal														1,835
H. Grenades (All Types)		A												
Hand Smoke White				15,600	546								12,600	480
CTG Diversionary MK 141														
Fuze Train Diversionary CHG					546			0			0		25,000	337
Subtotal														817
PRODUCTION SUPPORT														
PRODUCTION ENGINEERING	N/A				455			303			410			459
PRODUCT IMPROVEMENT	N/A				50						53			55
NON STANDARD ITEMS	N/A				200						100			118
Subtotal					705			303			563			632
TOTAL SMALL ARMS LANDING PARTY					4,031			4,017			8,122			9,945
2. OTHER SHIPGUN MUNITIONS														

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION	A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2		B. Line Item Nomenclature SOF ORDNANCE REPLISHMENT						C. DATE: FEBRUARY 1997						
	Weapon System Cost Elements \$(thousands)	Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999			
			Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	
HARDWARE															
A. 25mm Cartridges (All Types)		A													
CTG APDS-T Linked				23,210	616			55,240	1,413		71,775	1,923		33,100	906
CTG PGU-32U SAPHEL-T											81,620	1,731		163,350	3,568
Subtotal					616				1,413			3,654			4,474
B. 40mm Cartridges (All Types)		A													
CTG Green Star												212			
CTG Practice M203				45,000	263						5,000			40,700	99
CTG Practice (PUFF)				87,356	1,510									97,600	1,590
CTG Fixed HE								47,334	691						
Subtotal					1,773				691			212			1,689
C. Rockets (All Types)		A													
84MM M3 Smoke				1,616	992			1,200	716		2,400	1,620			
84MM M3 Illum				1,713	1,551			1,200	1,056		2,400	2,388			
84MM M3 HE PD											2,000	2,300		1,500	1,801
84MM M3 HE														3,500	3,066
84MM M3 TP FFV 552								1,000	774					2,000	1,834
84MM M3 Heat				2,732	3,653			1,886	2,682						
84MM M3 TP FV141								500	111					3,300	865
84MM M3 Accept Test					250							250			250
84MM M3 Flechette														3,300	1,650
Law Rockets				4,654	5,000										
Subtotal					11,446				5,339			6,558			9,466
PRODUCTION SUPPORT															
PRODUCTION ENGINEERING		N/A							587			513			561
PRODUCT IMPROVEMENT		N/A							300			50			52
Subtotal					0				887			563			613
TOTAL OTHER SHIPGUN MUNITIONS					13,835				8,330			10,987			16,242

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION		A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDNANCE REPLENISHMENT						C. DATE: FEBRUARY 1997				
Weapon System Cost Elements \$ (thousands)		Ident Code	FY 1996			FY 1997			FY 1998			FY 1999				
			Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost		
3. MK V SPECIAL OPERATIONS CRAFT (SOC) MUNITIONS																
HARDWARE																
A. 7.62mm Cartridges		A														
CTG AP Linked Dim Tracer				2,001,000	3,342											
CTG Ball Linked Dim Tracer				2,724,000	2,206											
Subtotal					5,548			0							0	
B. .50 Cal Cartridges (All Types)		A														
CTG Linked Dim Tracer							390,581	1,410								
Subtotal					0			1,410							0	
C. 25mm/30mm Cartridges (All Types)		A														
CTG Dummy				2,000	33											
CTG Training Practice (TP)				95,480	1,556											
CTG PGU 32-SAPHEI-T																
Subtotal					1,589			0								
D. Stinger Support Equipment		A														
Night Sights				8	111											
IFF Interrogators				20	774											
IFF Programmers				20	173											
Subtotal					1,058			0								0
PRODUCTION SUPPORT		N/A														
PRODUCTION ENGINEERING					134			35								152
Subtotal					134			35								152
TOTAL MK V SOC MUNITIONS					8,329			1,445							2,907	2,694
4. NAVY PYRO/DEMO																
HARDWARE		A														
A. Signals																



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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION	A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDNANCE REPLENISHMENT						C. DATE: FEBRUARY 1997			
	Ident.				FY 1996			FY 1997			FY 1998			
	Weapon System Cost Elements \$ (thousands)	Code	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost
Illum Red Star				5,040	192									
Illum Ground M125				8,018	351									
Signal Kit IR MK 79				14,944	340		14944	340					4,000	99
Signal Kit IR MK 132				14,934	750		14944	750			384			
Signal Kit Marine IR MK 132											442			
Signal Smoke Marine MK 131														0
Subtotal					1,633			1,090			826			99
B. Training Devices														
A														
Sim Proj Ground Burst										10,000	54		17,000	103
Sim Hand Grenade										30,000	108		15,000	55
Subtotal					0			0			162			158
C. Explosive Charges		A												
Exp Extru Petn				2,000	96		3,000	144						
40mm Flex Linear Chg				2,155	216		2,500	220						
80mm Flex Linear Chg				1,000	100		1,500	191						
Exp Chg Cont Small				2,382	685		1,535	422						
Exp Chg Cont Med				760	608		1,250	500						
Chg DML Exp Roll 38 Ft							400	211					500	192
Chg DML Exp Chg 78 Ft							310	163					347	187
Chg DML Shaped Flex 225 Gr/Ft										1,440	70			
Chg DML Shaped Flex 500 Gr/Ft													2,000	68
Chg Exp Cut Tape 2400 Gr/Ft													4,000	171
Chg Dial Exp Breach										170	1,578		180	1,528
Subtotal					1,705			1,851			1,648			2,146
D. Land Mines														
Mine, Anti Personnel				4,692	591									
Subtotal					591		0	0			877			0
E. Det Cord and Time Fize		A												

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION	A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDNANCE REPLENISHMENT						C. DATE: FEBRUARY 1997					
	Weapon System Cost Elements \$ (thousands)	Ident. Code	FY 1996		Total Cost	FY 1997			FY 1998			FY 1999				
			Unit Cost	QTY		Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost		
	Heavy Load Det Cord 100 Grft			500,000	400											
	Heavy Load Det Cord 200 Grft			500,000	650											
	Lightweight Det Cord															
	Clip Cord, Detonating MAI										10,000	1			500,000	105
	Subtotal				1,050				0	1						105
	F. Blast Caps and Initiators	A														
	Cap Blasting Elect Hero-Safe			50,000	457											
	Cap Blasting Non-Elect															
	Squib Elect MK 13															
	Non-EI Det w/Line initiator 50 Ft														10,000	51
	Non-EI Det w/Line initiator 100 Ft							5,978	191						20,000	108
	Non-EI Det w/Line initiator 500 Ft							6,850			7,000		322		1,200	40
	Detonating Delay Element 3.8 Sec.			5,000	64										3,000	115
	Detonating Delay Element 6.4 Sec.			5,000	64										3,000	39
	Detonating Delay Element 9.6 Sec.			5,000	64										3,000	39
	Simulators Nonele .50 Cal			1,900	741											
	Subtotal				1,390				954				322			573
	G. Cutters & Cartridges	A														
	Cutter M21 2 Sec Delay			4,747	388										3,700	304
	Cutter M20 Non Elect										1,600	481				
	Subtotal				388				0				481			304
	H. Anti Ship Mines & Components	A														
	Haversack Kit			1,150	230											
	Kit Back Pack MK 46										550	131				
	Spare Parts for Back Pack Kit										1,000	172				
	Back Pack Trailer Kit F/MK 46										100	17				
	Subtotal				230				0				320			0
	I. Other Pyro/Demo Items	A														
	Driver Power Actuated MK22							4,000	740							
	Subtotal				0				740				0			0

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION			A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDNANCE REPLENISHMENT				C. DATE: FEBRUARY 1997				
Weapon System Cost Elements \$(thousands)			Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999		
				Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost
PRODUCTION SUPPORT															
PRODUCTION ENGINEERING			N/A		1,451					749					820
PRODUCT IMPROVEMENT			N/A							250					100
RENOVATION COMPONENTS			N/A												20
GAUGE REQUIREMENTS			N/A							5					10
NON STANDARD			N/A												100
Subtotal					1,451					1,004					1,050
TOTAL NAVY PYRO DEMO					8,438					5,639					4,435
5. AFSOC TRAINING MUNITIONS															
A. 105mm CARTRIDGES			A		1,535		13,315		1,500		11,281			11,700	1,872
B. 25mm HEI CARTRIDGE PGU 38A/U			A		1,923		68,231		4,732		12,818			154,105	4,429
C. 25mm CARTIDGES PGU 24			A		207		15,777								
D. FUZE M732					373		5,180		754						
TOTAL AFSOC TRAINING MUNITIONS					4,038				6,986						6,301
6. AFSOC 25mm WRM			A												
A. 25mm Cartridges					4,653		91,235								0
TOTAL AFSOC 25MM WRM					4,653				0						
7. LIMPET			A		425										
LINE ITEM TOTAL					43,749				26,417						39,617

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - AMMUNITION	A. Appropriation / Budget Activity Title / No. Procurement, Defensewide / Proc. Just. / 2				B. Line Item Nomenclature SOF ORDINANCE REPLENISHMENT				C. DATE: FEBRUARY 1997			
	Ident. Code	FY 1996		Total Cost	FY 1997		Total Cost	FY 1998		Unit Cost	QTY	Total Cost
		Unit Cost	QTY		Unit Cost	QTY		Unit Cost	QTY			Total Cost
Weapon System Cost Elements												
NON STANDARD												
Subtotal	N/A			1,451			1,004					1,005
												1,050
TOTAL NAVY PYRO DEMO				8,438			5,639					5,942
												4,435
5. AFSOC TRAINING MUNITIONS												
A. 105mm CARTRIDGES	A		13,315	1,535		13,315	1,500		11,281		11,700	1,872
B. 25mm HEI CARTRIDGE PGU 38AJU	A		68,231	1,923		156,494	4,732		12,818		154,105	4,429
C. 25mm CARTRIDGES PGU 24	A		15,777	207								
D. FUZE M732			5,180	373		10,472	754					
TOTAL AFSOC TRAINING MUNITIONS				4,038			6,986					6,301
6. AFSOC 25mm WRM	A											
A. 25mm Cartridges			91,235	4,653								
TOTAL AFSOC 25MM WRM				4,653			0					0
7. LIMPET	A			425								
LINE ITEM TOTAL				43,749			26,417					33,379
												39,617

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		C. P-1 ITEM NOMENCLATURE SOF ORDNANCE REPLENISHMENT								
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	REP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
<p>The majority of items listed on the P-5 for this P-1 Line are purchased through the Single Managers for Conventional Ammunition (SMCA).</p> <p>The information required on this form is not available at the unit level.</p>										
D. REMARKS:										

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BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2					P-1 ITEM NOMENCLATURE MARITIME EQUIPMENT MODIFICATIONS					FEBRUARY 1997
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY										
COST (In Millions \$)	8.863	10.833	9.807	34.644	2.100	3.025	4.686	4.825		

**MISSION AND DESCRIPTION:** Program provides for various Patrol Coastal (PC) and MK V Special Operations Craft (SOC) maritime modifications and consolidates them into a single line item.

1. Patrol Coastal. Program provides for numerous modifications to the Cyclone Class PC ships. The modifications correct performance deficiencies identified through testing and/or operation. The upgrades improve situational awareness, self-defense capabilities, ship handling, speed, and human factors. Funding supports Title K alterations for emergent ship alterations that require headquarters expertise and/or headquarters centrally managed material.

FY 1998 PROGRAM JUSTIFICATION: Procures and installs Rasterscan collision avoid radar overlay (V4) software modifications, active noise cancellation systems, bridge wing controls, propeller upgrades, and stern flap sets. Includes communication alterations and software modifications (K-Alterations).

FY 1999 PROGRAM JUSTIFICATION: Procures and installs Rasterscan collision avoid radar overlay (V4) software modifications, forward looking infrared systems, and stern flap sets. Includes communication alterations and software modifications (K-Alterations).

2. MK V SOC. Program provides pre-planned product improvements to baseline (craft) capabilities in the areas of weapons, electronics, and night vision. Improved weapons/mounts include, but are not limited to, GAU-17(7.62MM) mini-guns, MK38 (25MM) chain guns, and MK95 (twin .50 cal) mounts. Electronics improvements include providing electronic countermeasures and support measures (electronic attack and electronic surveillance) capabilities and are programmed in the Communications and Equipment Line Item.

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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997					
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE MARITIME EQUIPMENT MODIFICATIONS							
2. MK V Special Operations Craft (SOC) (Cont'd.)								
Night vision improvements are centered on a Forward Looking Infrared Capability (FLIR).								
FY 1998 PROGRAM JUSTIFICATION: Funds procure weapons/mounts for MK V SOC's in support of approved Pre-Planned Product Improvements (P3Is) as detailed in the System Improvement Plan (SIP). Procurement of the FLIR, a P3I effort detailed in the SIP, begins in FY98.								
FY 1999 PROGRAM JUSTIFICATION: Funds complete the procurement of weapons/mounts and the FLIR for all MK V SOC's.								
MODIFICATION SUMMARY FOR MARITIME EQUIPMENT								
DESCRIPTION	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
1. PC Command and Control Software Upgrades	.855	.338	1.116	1.530	.230	.259	.265	.270
2. PC Stern Flap Modification		.231	.053	.057				
3. PC Active Noise Cancellation	.869	.067	.057					
4. PC Bridge Wing Controls	.300	.183	.052					
5. PC Threat Warning System (* Moved to SOF Intelligence Line Item beginning in FY 1997 (PRIVATEER))	5.133	*	*					
6. PC Forward Looking Infrared Upgrade				12.213	1.269	.779	.441	.563
7. PC Propeller Upgrade	1.138	.068	.331					

P-1 SHOPPING LIST, ITEM NO. 60

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EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE MARITIME EQUIPMENT MODIFICATIONS		
8. PC Communication Alterations	2.827	.536	.601
9. MK V SOC Weapons	3.607	3.781	1.236
10. MK V SOC Forward Looking Infrared		1.484	19.072
11. PC Mission Dependent Modular Aft Deck			1.987
12. PC Combatant Craft Retrieval System	.425		3.980
13. PC Self Defense	6.000		3.992
TOTAL	8.720	34.644	2.100
Patrol Coastal K Alts	.143	.106	3.025
TOTAL LINE ITEM	8.863	34.644	4.686
			4.825

P-1 SHOPPING LIST, ITEM NO. 60

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Page 3 of 3 Pages  
EXHIBIT P-40 Budget Item Justification Sheet





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DATE: FEBRUARY 1997

INDIVIDUAL MODIFICATION  
MODIFICATION TITLE: PATROL COASTAL COMMAND AND CONTROL (C2) SOFTWARE UPGRADE  
MODELS OF SYSTEMS AFFECTED: Patrol Coastal  
DESCRIPTION/JUSTIFICATION:

The C2 software upgrades provide incremental modifications to the C2 system for the integration of upgraded subsystems to include PRIVATEER Threat Warning System, Joint Maritime Combat Information System (JMCIS), formerly known as Joint Operational Tactical System), and the RASCAR Collision Avoidance Radar Overlay.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

CDR 8/95 1st trial install: 3/97 1st Production Install: 3/97.

FINANCIAL PLAN: (\$ in millions)

FYs		FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		TOTAL	
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	0.1																					0	0.1
																						0	0.0

RDT&E

PROCUREMENT

Self Diagnostic Test Sets (no install)				4	.1																	4	0.1
Threat Warning NRE (V3)			15	.2																		15	0.2
JMCIS NRE (V3)			15	.1																		15	0.1
Equipment (V3)			4	.4	2	.2	7	.7	2	.2												15	1.5
Radar Overlay (V4)									15	.5												15	0.5
Fleet Enhancements (V5)											5	.1	10	.3								15	0.4
																						0	0.0
																						0	0.0
																						0	0.0
																						0	0.0

Installation of Hardware

FY96 - V3				4	.2																	4	0.2
FY97 - V3						2	.1															2	0.1
FY98 - V3								7	.4													7	0.4
FY99 - V3										2	.1											2	0.1
-V4										13	.6	2	.1									15	0.7
FY00 - V5														5	.2							5	0.2
FY01 - V5														2	.1	8	.3					10	0.4
																						0	0.0
To Complete																						0	0.0
																						0	0.0

Total Procurement Cost

METHOD OF IMPLEMENTATION:

GOVT/CONTRACTOR ALTERATION INSTALLATION TEAM

ADMINISTRATIVE LEADTIME: 1 MONTH PRODUCTION LEADTIME: 4 MONTHS

CONTRACT DATE:

Current Year: 10/96

DELIVERY DATE:

Current Year: 02/97

P-1 SHOPPING LIST, ITEM NO. 60

Budget Year 1: 10/97

Budget Year 2: 10/98

Budget Year 1: 02/98

Budget Year 2: 02/99

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PATROL COASTAL COMMAND AND CONTROL (C2) SOFTWARE UPGRADE

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	4				2		2	2	3	4	6	4	1				2
Out	4				2		2	2	3	4	6	4	1				2

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In					1	2	2	2	2	2	2	2		45
Out					1	2	2	2	2	2	2	2		45

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## INDIVIDUAL MODIFICATION

# MODIFICATION TTTT E. PATROL COASTAL STERN FLAP MODIFICATION

**MODELS OF SYSTEMS AFFECTED: Patrol Coastal**

**DESCRIPTION/JUSTIFICATION:** The NDI design Patrol Coastal ship had a minimal margin for growth in weight/displacement. Maintaining the required 35 knot speed is essential for accomplishing the coastal patrol and interdiction mission and self defense. Stern flaps will improve the ship's ability to maintain the required speed at the current displacement. The installation must be accomplished in dry dock, so installations coincide with scheduled dry dock availabilities. PC-13 was delivered with this modification installed. PC-14 stern flap will be installed during ship construction. PC-1, PC-2 have been accomplished in previous DPMA's.

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

1st Trial Install: 9/95 1st Production Install: 6/97

**FINANCIAL PLAN: (\$ in millions)**[illegible]

**RDT&E**

## PROCUREMENT

[illegible]

## Installation of Hardware

BUDGET OF AUTHORITY						
FY96						0 0.0
FY97		6 .1				6 0.1
FY98			2 *			2 0.0
FY99				2 .1		2 0.1
FY00						0 0.0
FY01						0 0.0
FY02						0 0.0
FY03						0 0.0
To Complete						0 0.0
Total	0 0.0	0 0.0	6 0.1	2 0.0	2 0.1	0 0.0
						0 0.0
						10 0.2

**Total Installation Cost**

\* Cost below 100K.

**Total Procurement Cost**

### **METHOD OF IMPLEMENTATION: DEPOT**

**CONTRACT DATE:**

DELIVERY DATE:

**ADMINISTRATIVE LEADTIME: 1 MONTH**

Budget Year 1: 2/98

**Budget Year 1: 2/98**

ADMINISTRATIVE LEAD TIME: 1 MONTH

**Budget Year 2: 2/99**

Budget Year 2: 3/99

**PRODUCTION LEADTIME: 2 MONTHS**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PATROL COASTAL STERN FLAP MODIFICATION

## INSTALLATION SCHEDULE

	PY's	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	2			2	2		2				2						
Out			2		2	2		2				2					

  

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														10
Out														10

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## INDIVIDUAL MODIFICATION

**MODIFICATION TITLE: PATROL COASTAL ACTIVE NOISE CANCELLATION**

## MODELS OF SYSTEMS AFFECTED: Patrol Coastal

**DESCRIPTION/JUSTIFICATION:** Excessive airborne noise in the berthing compartments is a sea trial deficiency for this ship class which requires correction. The installation of active noise cancellation (ANC) systems in the berthing areas complements the propeller upgrade to resolve the excessive noise problem and improve human factors. The first shipset was procured as a prototype and installed with RDT&E funds. PC-14 ANC will be installed during ship construction.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

1st trial install: 8/95: 1st Production Install: 2/97.

**FINANCIAL PLAN: (\$ in millions)**[illegible]

**RDT&B**

## PROCUREMENT

[illegible]

## Installation of Hardware

		6	.1	6	*	12	0.1
FY96						0	0.0
FY97						0	0.0
FY98						0	0.0
FY99						0	0.0
FY00						0	0.0
FY01						0	0.0
FY02						0	0.0
FY03						0	0.0
To Complete						0	0.0

**Total Installation Cost**  
\* Costs below 100K.

Total Procurement Cost

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

**DELIVERY DATE:**

## ALTERATION INSTALL TEAM

**Current Year:** N/A

**Current Year:** N/A

**ALTERATION/INSTALL TEAM**

**Current Year:** N/A

**Current Year:** N/A

**ADMINISTRATIVE LEADTIME: 9 MONTHS**

Year 1: \_\_\_\_\_

Year 1: \_\_\_\_\_

**PRODUCTION LEADTIME: 6 MONTHS**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PATROL COASTAL ACTIVE NOISE CANCELLATION

## INSTALLATION SCHEDULE

	FY's	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In			2	2	2		2	2	2								
Out			2	2	2		2	2	2								

  

	2001				2002				2003				To Complete		Total	
	1	2	3	4	1	2	3	4	1	2	3	4				
In															12	
Out															12	

P-1 SHOPPING LIST, ITEM NO. 60

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE E: PATROL COASTAL BRIDGE WING CONTROLS

## MODELS OF SYSTEMS AFFECTED: Patrol Coastal

**DESCRIPTION/JUSTIFICATION:** Bridge wing controls are required to improve ship handling/maneuverability at the pier. Each ship will have controls installed on both bridge wings.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

1st Trial Install: 3/97 1st Production Install: 4/97

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

	6	2	7	*	13	0.2
FY96					0	0.0
FY97					0	0.0
FY98					0	0.0
FY99					0	0.0
FY00					0	0.0
FY01					0	0.0
FY02					0	0.0
FY03					0	0.0
To Complete					0	0.0

**Total Installation Cost**

\* Cost below 100K.

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

DELIVERY DATE:

0.0 0.0  
ALTERATION INSTALL TEAM

**Current Year: 1/97**

**Current Year: 4/97**

**ADMINISTRATIVE LEAD TIME: 2 MONTHS**

[illegible]

**Budget Year 1:** \_\_\_\_\_

**PRODUCTION LEADTIME: 3 MONTHS**

1

1



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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PATROL COASTAL BRIDGE WING CONTROLS

## INSTALLATION SCHEDULE

	PY's	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In				2	4	2	2	2	1								
Out				2	4	2	2	2	1								

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														13
Out														13

P-1 SHOPPING LIST, ITEM NO. 60

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## INDIVIDUAL MODIFICATION

**MODIFICATION TITLE: PC FORWARD LOOKING INFRARED UPGRADE**

### MODELS OF SYSTEMS AFFECTED: Patrol Coastal

**DESCRIPTION/JUSTIFICATION:** Forward looking infrared provides a long range, electro-optic passive imaging and weapons direction kit to exploit the visible and infra-red spectrum and complement current and future electronic support measures and radar systems.

DATE: FEBRUARY 1997

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: CDR 1/98; First Install 8/00

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

[illegible]

**Total Installation Cost**

Total Procurement Cost

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:**

DEPOT

**Current Year:** N/A

**Current Year:** N/A

0.0 0.0 0.0 0.0

ADMINISTRATIVE

**Budget Year 1: N/A**

ADMINISTRATIVE LEADTIME: 11 MONTHS

**Budget Year 2: 08/09**

**Budget Year 2: 02/00**

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**SHLENGER 9**

**P-1 SHOPPING LIST, ITEM NO. 60**

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EXHIBIT P-3a

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PC FORWARD LOOKING INFRARED UPGRADE

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In																4	4
Out																2	4

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In		4	1											13
Out	2	2	3											13

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## INDIVIDUAL MODIFICATION

DATE: FEBRUARY 1997

### MODELS OF SYSTEMS AFFECTED: Patrol Coastal

**DESCRIPTION/JUSTIFICATION:**

Replacement of existing propellers is required to reduce airborne noise in berthing compartments (a sea trial deficiency) and to meet full power absorption requirements at a higher full load displacement. A total of 78 propellers will be procured. There will be 13 chinets (4 propellers each) procured and installed. The remaining propellers (26) will be procured as spares.

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

1st trial install: 8/95: 1st Production Install: 6/96.

**FINANCIAL PLAN: (\$ in millions)**

FINANCIAL PLAN: (\$ in millions)																								
	FYs		FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
1.1																								
RDTE&E																								
PROCUREMENT																								
Alteration/Engineering					0.1		.2		.3													0	0.6	
Propellers					26	1.0																26	1.0	
																						0	0.0	
																						0	0.0	
																						0	0.0	
																						0	0.0	
																						0	0.0	
																						0	0.0	
																						0	0.0	
																						0	0.0	

## Installation of Hardware

[illegible]

**Total Installation Cost**

Total Procurement Cost

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:****DELIVERY DATE:**

**P-1 SHOPPING LIST, ITEM NO. 60**

**IMA**

**Current Year: 9/96**

**Current Year: 6/97**

**Budget Year 1:**

**Budget Year 1:**

**ADMINISTRATIVE LEADTIME:**

### Budget Year 2:

### Budget Year 2:

**PRODUCTION LEADTIME:**

**Page 1 of 1**  
**EXHIBIT P-3A**

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## Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: UNDERBELLY PROTECTION SYSTEM

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In								1	1	6	6	6	4				
Out								1	1	6	6	6	4				

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														24
Out														24

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DATE: FEBRUARY 1997

INDIVIDUAL MODIFICATION  
MODIFICATION TITLE: MC-130H APU UPGRADE  
MODELS OF SYSTEMS AFFECTED: MC-130H  
DESCRIPTION/JUSTIFICATION:

Program upgrades the existing auxiliary power unit 85-180L on 24 MC-130H aircraft to provide for the following: improves nozzle and burner to use alternative fuels at altitude; increases cooling by 300%; increases bleed flow by 45%; decreases bleed air temperature; extends turbine life; allows for ground cooling when using the auxiliary power unit; and increases the mean time between failures from 2500 hours to 9000 hours. This upgrade will be form, fit, and function to the existing system.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Contract Award, Mar 97; Trial Install, Aug 98; Kit Proof, Aug 98; 1st Production Install, Nov 98

AF FM 1067 and MNS approved Mar 94. Supports MAC 005-83 IVA Talon II SORD. (Aircraft Breakout: 0 ANG; 0 AFRES; 24 Active)

FINANCIAL PLAN: (\$ in millions)

	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
Qty	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Qty											

RDT&E

PROCUREMENT

Installation Kits (Includes installation)		20	1.0	3	.1						23	1.1
Installation Kit Nonrecurring		1	.5								1	0.5
Equipment		20	2.5	3	.4						23	2.9
Equipment Nonrecurring		1	.3								1	0.3
Engineering Change Orders			.1		.3						0	0.4
Data			.9								0	0.9
Trainer			.1								0	0.1
Spares		3	*	3	.5						6	0.5
											0	0.0
											0	0.0

Installation of Hardware

FYs												
FY95											0	0.0
FY96											0	0.0
FY97 - Install 19 APU Kits				1	20						21	0.0
FY98 - Install 3 APU Kits					2	1					3	0.0
FY99											0	0.0
FY00											0	0.0
FY01											0	0.0
To Complete											0	0.0

Total Installation Cost

\* Upgrades to APUs to production configuration at a cost of 30K.

Total Procurement Cost

0.0

METHOD OF IMPLEMENTATION:

CONTRACTOR FIELD TEAM

ADMINISTRATIVE LEADTIME: 12 MONTHS

PRODUCTION LEADTIME: 19 MONTHS

CONTRACT DATE:

Current Year: 2/97

Budget Year 1: 1/98

Budget Year 2:

DELIVERY DATE:

Current Year: 4/98

Budget Year 1: 1/99

Budget Year 2:

P-1 SHOPPING LIST, ITEM NO. 47

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MC-130H APU

## INSTALLATION SCHEDULE

PYs	1997				1998				1999				2000			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In								1	22	1						
Out								1	22	1						

	2001				2002				2003				To Complete		Total	
	1	2	3	4	1	2	3	4	1	2	3	4				
In															24	
Out															24	

P-1 SHOPPING LIST, ITEM NO. 47

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: ALQ-172 LOW BAND JAMMER UPGRADE

## INSTALLATION SCHEDULE

	PY's	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In													2				2
Out															2		2

	2001				2002				2003				To Complete		Total	
	1	2	3	4	1	2	3	4	1	2	3	4				
In				2	2	2	2	1	1	1	2	1	19		37	
Out			2	2	2	2	1	1	1	1	2	1	19		37	

P-1 SHOPPING LIST, ITEM NO. 47

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EXHIBIT P-3a

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INDIVIDUAL MODIFICATION

MODIFICATION TITLE: PC COMMUNICATIONS ALTERATIONS

MODELS OF SYSTEMS AFFECTED: Patrol Coastal

DESCRIPTION/JUSTIFICATION: Communications upgrade provides: Satellite Communications (SATCOM) 5kHz and 25kHz Demand Assign Multiple Access (DAMA) Radio capability as required by the Chief of Naval Operations N6; Joint Maritime Command Information System (JMCIS) connectivity to avoid blue on blue engagements; an antenna combiner sub system to improve and maintain SATCOM link 360 degrees; and HF filtering to enable simultaneous transmit and receive within 5% frequency range.

DATE: FEBRUARY 1997

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

CDR; JUN 97; First install: Mar 98

FINANCIAL PLAN: (\$ in millions)

PYs	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
				4							4
											0
				13							13
											0
				13	1.0	13	.4	13	.4		39
											1.8
											0
											0
											0
											0
											0
											0

RDT&E

PROCUREMENT

Installation Kits				4							4	0.4
Installation Kit Nonrecurring											0	0.0
*Equipment				13	.8						13	0.8
Equipment Nonrecurring											0	0.0
Engineering Change Orders				13	1.0	13	.4	13	.4		39	1.8
											0	0.0
											0	0.0
											0	0.0
											0	0.0
											0	0.0
											0	0.0

Installation of Hardware

FY96											0	0.0
FY97											0	0.0
FY98 - Install Kit				4	.3						4	0.3
FY98 - ECO				13	.3						13	0.3
FY99 - ECO						13	.2				13	0.2
FY00 - ECO								13	.2		13	0.2
											0	0.0
											0	0.0
To Complete											0	0.0

Total Installation Cost

\* HF Radios, no install costs (slip in/slip out)

Total Procurement Cost

METHOD OF IMPLEMENTATION:

CONTRACT DATE:

DELIVERY DATE:

P-1 SHOPPING LIST, ITEM NO. 60

GOVT/CONTRACTOR/ALT

Current Year: N/A

Current Year: N/A

ADMINISTRATIVE LEADTIME: 4 MONTHS

Budget Year 1: 02/98

Budget Year 1: 08/98

PRODUCTION LEADTIME: 6 MONTHS

Budget Year 2: 02/99

Budget Year 2: 08/99

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PC COMMUNICATIONS ALTERATIONS

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In						4	6	6	1	4	4	4	1	4	4	4	1
Out						4	6	6	1	4	4	4	1	4	4	4	1

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														43
Out														43

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: MK V SPECIAL OPERATIONS CRAFT (SOC) WEAPONS

**MODELS OF SYSTEMS AFFECTED: MK V SOC**

**DESCRIPTION/JUSTIFICATION:**

Upgrades the MK V weapons capabilities from the baseline craft. Each upgrade suite provides two GAU-17 (7.62MM mini-guns), one MK38 (25MM chain gun) weapons, and two MK95 (twin 12.7MM) mounts per craft. All items are GFE requiring minor integration efforts.

DATE: FEBRUARY 1997

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

**Primary hardware and ancillary components will be procured primarily via purchase orders/military interdepartmental purchase requests upon availability of funding.**

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## Installation of Hardware

[illegible]

**Total Installation Cost**

**\* Costs less than 100k.**

**Total Procurement Cost**

## ORGANIZATIONAL LEVEL

**PRODUCTION LEADTIME: 12 MONTHS**

**CONTRACT DATE:**

**Current Year: 01/97**

DELIVERY DATE:

**Budget Year 1: 01/98**

**Budget Year 2: 01/99**

**Budget Year 1: 01/99**

**Budget Year 2: 01/00**

**P-1 SHOPPING LIST. ITEM NO. 60**

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EXHIBIT P-3A

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## Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MK V SPECIAL OPERATIONS CRAFT (SOC) WEAPONS

## INSTALLATION SCHEDULE

	PY's	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In				8			6	4			2						
Out					8			6	4			2					

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														20
Out														20

FOR OFFICIAL USE ONLY

## INDIVIDUAL MODIFICATION

**MODIFICATION TITLE: MK V SOC FORWARD LOOKING INFRARED**

## MODELS OF SYSTEMS AFFECTED: MK V SOC

**DESCRIPTION/JUSTIFICATION:** Requirement is to adapt an available in-service or non-developmental FLIR system to the baseline MKV SOC. This will enhance the crews ability to detect/classify contacts or observe potential beach landing sites.

DATE: FEBRUARY 1997

**DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:** Market Survey; Sept 96; Program Review: Oct 96; Test & Evaluation: Nov 96 - Mar 97.

**FINANCIAL PLAN: (\$ in millions)**[illegible]

RDT&amp;E

## PROCUREMENT

Installation Kits	2	1.3	18	15.6	20	16.9
Install Kits Nonrecur					0	0.0
Installed Equipment					0	0.0
Install Equipment Nonrecur					0	0.0
Mod of Spares					0	0.0
Data					0	0.0
					0	0.0
					0	0.0
					0	0.0
					0	0.0
Installation of Hardware					0	0.0
FY96					0	0.0
FY97					0	0.0
FY98	2	.2	18	3.6	20	3.8
FY99					0	0.0
FY00					0	0.0
FY01					0	0.0
FY02					0	0.0
FY03					0	0.0
To Complete					0	0.0
Total Installation Cost	2	0.2	18	3.6	20	3.8

**Total Procurement Cost**

### METHOD OF IMPLEMENTATION:

**CONTRACT DATE:****DELIVERY DATE:**

ALTERNATION INSTALL TEAM

Current Year: NA

**Current Year: NA**

19.2	0.0	0.
ADMINISTRATIVE LEADTIME:		

**Budget Year 1: 01/98**

**Budget Year 1: 06/98**

**PRODUCTION LEADTIME:** 0.0 0.0 0.0

**Budget Year 2: 10/98**

**Budget Year 2: 03/98**

**P-1 SHOPPING LIST, ITEM NO. 60**

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EXHIBIT P-3a

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## Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: MK V SOC FORWARD LOOKING RADAR

## INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In								2		6	6	4	2				
Out									2		6	6	4	2			

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														20
Out														20

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BUDGET ITEM JUSTIFICATION SHEET		DATE							FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE NAVAL SPECIAL WARFARE RIGID INFLATABLE BOAT									
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03			
QUANTITY											
COST (In Millions \$)			18.121	15.986	16.331	9.393	9.475	10.083			

**MISSION AND DESCRIPTION:** The Naval Special Warfare (NSW) Rigid Inflatable Boat (RIB) program provides a medium range surface mobility platform for SOF insertion and extraction and replaces the Special Warfare Craft (Light), or SEAFOX, which has ended its service life. The program supports the procurement of RIBs, trailers, deployment packages, on-board spares, and provides engineering support. This effort transitioned from SOF Maritime Equipment in FY 98.

**FY 1998 PROGRAM JUSTIFICATION:** Funds procure twenty Full-Rate Production (FRP) RIBs with trailers, prime movers, deployment packages, equipment shelters, electronics, and initial and on-board spares. Deliveries of FRP assets will commence within 12 months of ordering.

**FY 1999 PROGRAM JUSTIFICATION:** Funds procure eighteen FRP RIBs with trailers, prime movers, deployment packages, equipment shelters, electronics, and initial and on-board spares. Deliveries of FRP assets will commence within 12 months of ordering.





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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION/BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE/2				C. P-1 ITEM NOMENCLATURE NAVAL SPECIAL WARFARE RIGID INFLATABLE BOAT						
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACT AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. NSW RIB										
(1) Boats										
FY 98	20	534.050	USSOCOM	OCT 95	C/FP OPTION	UNKNOWN	OCT 97	DEC 97	YES	
FY 99	18	541.611	USSOCOM	OCT 95	C/FP OPTION	UNKNOWN	OCT 98	DEC 98		
(2) Trailers										
FY 98	20	32.000	USSOCOM	OCT 95	C/FP OPTION	UNKNOWN	OCT 97	DEC 97	YES	
FY 99	18	32.722		OCT 95			OCT 98	DEC 98		
(3) Movers										
FY 98	9	74.444		OCT 95	MIPR	GSA	OCT 97	DEC 97		
(4) Deployment Packages										
FY 98	10	313.400	USSOCOM	OCT 95	OPTION	VARIOUS	OCT 97	DEC 97	YES	
FY 99	9	321.444		OCT 95			OCT 98	DEC 98		
(5) Shelters										
FY 98	20	14.150	USSOCOM	OCT 95	OPTION	VARIOUS	OCT 97	DEC 97	YES	
FY 99	18	14.500		OCT 95			OCT 98	DEC 98		
D. REMARKS:										



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BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2										P-1 ITEM NOMENCLATURE SPARES AND REPAIR PARTS
MISSION AND DESCRIPTION: Consolidates all spares and repair parts funding into a single line item, rather than having the funding spread across several line items.										
1. Aircraft Initial Spares. This program finances both initial weapon system and aircraft modification spares for all SOF fixed and rotary wing aircraft. Initial weapon system spares include new production spares, peculiar support equipment spares, and upgrades to existing spares required to support initial operations of new aircraft and increases in the inventory of additional end items. Aircraft modification spares include new spare parts required during the initial operation of modified airborne systems.										
FY 1998 PROGRAM JUSTIFICATION: Per DMRD 904 and in accordance with Air Force policy, these funds reimburse the Air Force Stock fund for SOF initial spares provisioned with Air Force Stock fund obligation authority.										
FY 1999 PROGRAM JUSTIFICATION: Per DMRD 904 and in accordance with Air Force policy, these funds reimburse the Air Force Stock fund for SOF initial spares provisioned with Air Force Stock fund obligation authority.										
QUANTITY										
COST (In Millions \$)	31.056	36.134	42.538	26.322	15.904	10.798	5.060			4.465

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SPARES AND REPAIR PARTS	FEBRUARY 1997
<p>2. MK V Special Operations Craft (SOC). Funds the procurement and delivery of spares, repair parts and initial consumables that constitute operational deployment packages and major (shore based) spares "kits".</p> <p>FY 1998 PROGRAM JUSTIFICATION: Funds procure the deployment packages and major shore based spares required for the three detachments being procured during FY98.</p>		

P-1 SHOPPING LIST, ITEM NO. 62

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 Page 2 of 2 Pages  
 EXHIBIT P-40 Budget Item Justification Sheet

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Aviation and Shipbuilding	A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2				B. Line Item Nomenclature SPARES AND REPAIR PARTS						C. DATE: FEBRUARY 1997			
	Ident.	FY 1996			FY 1997			FY 1998			FY 1999			
		Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	
Weapon System Cost Elements (\$ thousands)														
1. Aircraft Initial Spares				18,212			20,296			30,541			26,322	
Subtotal				18,212			20,296			30,541			26,322	
2. MK 8 Mod 1 SDV														
A. Initial Spares	N/A			924			1,725							
Subtotal				924			1,725			0			0	
3. MK V Special Operations Craft														
A. Major (Shore Based) Spares (Kit)	A	3,621,000	2	7,242			8,756	2,323,000	3	6,969				
B. Deployment Package	N/A	1,559,333	3	4,678			5,357	1,676,000	3	5,028				
Subtotal				11,920			14,113			11,997			0	
LINE ITEM TOTAL				31,056			36,134			42,538			26,322	

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE SPARES AND REPAIR PARTS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. MK V Special Operations Craft										
A. Major (Shore Based) Spares (Kit)										
FY 96	2	3,621,000	USSOCOM		C/FP	VARIOUS	MAY 96	JUN 96	YES	
FY 97	4	2,189,000	USSOCOM		C/FP	VARIOUS	DEC 96	JAN 97	YES	
FY 98	3	2,323,000	USSOCOM		C/FP	VARIOUS	OCT 97	JAN 98	YES	
B. Deployment Package										
FY 96	3	1,559,333	USSOCOM		C/FP	VARIOUS	MAY 96	JUN 96	YES	
FY 97	3	1,785,667	USSOCOM		C/FP	VARIOUS	DEC 96	JAN 97	YES	
FY 98	3	1,676,000	USSOCOM		C/FP	VARIOUS	OCT 97	JAN 98	YES	
D. REMARKS:										

BUDGET ITEM JUSTIFICATION SHEET							DATE		
							FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS							
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY									
COST (In Millions \$)	35.272	40.680	57.406	72.576	71.637	67.451	56.650	28.203	

**MISSION AND DESCRIPTION:** This program provides for communication systems to support Special Operations Forces (SOF). The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require communications equipment that will improve their war fighting capability without degrading their mobility. Therefore, SOF Communications Equipment & Electronics is a continuing effort to procure lightweight and efficient SOF Command, Control, Communications, and Computer (C4) capabilities.

USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computer and Intelligence (C4I) systems continue to provide SOF with the required capabilities into the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and the timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture will employ the latest standards and technology by transitioning from separate systems to full integration with the infosphere. The infosphere is a multitude of existing and projected national assets that will allow SOF elements to operate with any force combination in multiple environments. The C4I programs funded in this procurement line are grouped by the level of organizational element they support: Operational Element (Team), Above Operational Element (Deployed) and Above Operational Element (Garrison).

### OPERATIONAL ELEMENT (TEAM)



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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS		
<p>1. Special Mission Radio System (SMRS). SMRS is the material solution for the SOF High Frequency (HF) requirement manpack radio. SMRS provides SOF with smaller lighter weight systems for long range communications. SMRS when fully upgraded will contain Line-of-Sight (LOS), Near Vertical Incident Skywave (NVIS) and Beyond Line-of-Sight (BLOS) voice, data and Low Probability of Intercept/Low Probability of Detection (LPI/LPD) communications capabilities, embedded COMSEC, both MIL-STD and special Automatic Link Establishment (ALE). Deployed in hostile and clandestine environments, the system consists of manpack radios and transit base stations. The upgrade effort provides fielded SMRS co-resident MIL STD and non-standard ALE and internal COMSEC capabilities.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures 115 manpack radios, 90 vehicle mount kits and 6 transportable base stations (TBS). Upgrades 240 manpack radios with system battery boxes, whip antenna mounts, co-resident automatic link establishment and COMSEC boards and 18 transmit base station systems through evolutionary technology insertions.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 160 vehicle mount kits and 6 transit base stations. Upgrades 690 manpack radios and 29 transit base station systems through evolutionary technology insertions.</p> <p>2. NSW Tactical Radio Systems (TRS). Provides Naval Special Warfare (NSW) a maritime tactical communications system which provides radio control/interior communications and a drop-in communications package (DICP) capable of housing any combination of up to four HF, VHF, UHF, and SATCOM radios and associated COMSEC. Additionally, it includes a communications-capable helmet.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Provides technical post production support to include operational certification of the TRS at the new NSW rigid inflatable boat plants.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Continues technical post production support.</p>		

P-1 SHOPPING LIST, ITEM NO. 63

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 EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS		
<p>3. Multi-band/Multi-mission Radio (MBMMR). A joint SOF requirement, MBMMR provides a lightweight, secure, manpackable, multi-band transceiver capability operating in the following frequency bands: VHF-FM, VHF-AM, UHF-AM, and UHF-FM satellite communications in a single radio, reducing the number of radios required to be carried by each team.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures 150 manpack and 130 vehicular radios.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 182 manpack and 130 vehicular radios.</p> <p>4. Aircraft Wireless Intercom System (AWIS). AWIS allows reliable communications between Special Operations (SO) aircraft crew members, both external and internal to the aircraft, eliminates need for a physical hardware connection between the crew member and the aircraft increasing safety. AWIS is self-contained, portable, lightweight, and easily interchangeable between the various SO aircraft.</p> <p>5. Multi-Band Inter/Intra Team Radio (MBITR). The MBITR will provide lightweight, handheld, inter/intra team communications for Joint SOF. SOF teams conduct air, ground, and maritime missions across the entire operational spectrum. These missions currently require SOF teams carry multiple handheld radios operating in several different frequency bands to ensure positive communications. The MBITR will provide each of these frequency bands in a single handheld radio with embedded communications security (COMSEC).</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures 730 handheld radios.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 375 handheld radios.</p> <p>6. CONDOR. CONDOR is a secure worldwide cellular telephone service with the inter/intra team capability. The system consists of handset equipment, mobile base station, low earth orbit satellite constellation with gateways, airborne base stations/relays, and manpack cell</p>			

P-1 SHOPPING LIST, ITEM NO. 63

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EXHIBIT P-40 Budget Item Justification Sheet

## FOR OFFICIAL USE ONLY

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS		
sites/gateways which supports 2000 users. These systems will support SOF in all aspects of their SOF missions.		
FY 1998 PROGRAM JUSTIFICATION: Procures 400 cellular phones and 3 Gateways.		
FY 1999 PROGRAM JUSTIFICATION: Procures 550 cellular phones, 70 water cases, and 4 Gateways.		
7. AN/PRC-117D(V2). The AN/PRC-117D(V2) modification kit incorporates UHF SATCOM, UHF/AM line of sight and SINGARS capability into the 117B radio.		
<u>ABOVE OPERATIONAL ELEMENT (DEPLOYED)</u>		
8. SOF Tactical Assured Connectivity Systems (SOFTACS). The SOFTACS program will provide significantly increased information transfer capability to deployed Special Operations Forces (SOF). It will field an integrated and balanced suite of communications systems designed to support high capacity, digital, secure, interoperable transmission and switching requirements of SOF command, control, communications, computer and intelligence programs. SOFTACS will provide the wideband transmission system to support the data requirements of other programs such as the SOF Intelligence Vehicle.		
FY 1998 PROGRAM JUSTIFICATION: Procures 5 SOFTACS.		
FY 1999 PROGRAM JUSTIFICATION: Procures 4 SOFTACS.		
9. Joint Base Station (JBS). JBS is an evolutionary acquisition program which encompasses five service-specific requirements: TSC-135 (core capability, commercial vehicle system), TSC-135 (V)1 (military vehicle system with transit case capabilities), TSC-135 (V)2 (transit		

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS	FEBRUARY 1997
<p>case system), TSC-135 (V)3 (fixed site system), and TSC-135 (V)4 (modular communications system). JBS will provide SOF with continuous, reliable communications among SOF component commands while allowing for differences in missions. JBS will contain line-of-sight (LOS) and beyond-LOS radios, and associated message handling and switching equipment, providing command and control voice, imagery, data, and facsimile.</p> <p>(a) Joint Base Station Core System (JBS Core). Formerly Task Unit Van, is a self-contained vehicular communications system mounted in a highly mobile, four wheel drive commercial vehicle with trailer which enables Naval Special Warfare Task Units to rapidly relay and receive tactical and intelligence information from infiltrated elements to higher authority. Communication-electronics will be modularized, allowing for rapid installation and/or removal of individual equipment or the entire suite in support of mission specific scenarios. Seven JBS Core System are in production and fielding. IOC achieved November 95.</p> <p>(b) Joint Base Station Variant 1 (JBS V1). Formerly Special Forces Base Station, is a state-of-the-art, highly mobile, communications base station assemblage integrated into a military shelter mounted on a Packhorse fifth-wheel trailer. The prime mover is a HMMWV. The system provides U.S. Army Special Operations Command commanders with an operational communications capability. The system is designed to allow for rapid removal and installation of individual equipment or entire racks of equipment into a transit case option. This is the initial procurement of production hardware for this system.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures 4 JBS V1 Vehicular systems and 2 Transit Case systems.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 4 JBS V1 Vehicular systems.</p> <p>(c) Joint Base Station Variant 2 (JBS V2). Formerly Special Operations Communications Package, is a man-transportable integrated transit case system that provides U.S. Air Force Special Operations Command commanders with an operational transit case capability. JBS</p>		

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS	FEBRUARY 1997
<p>V2 is small enough to be transportable in the back of a vehicle or loaded onto a 463L aircraft pallet. This package replaces the Special Communications Integrated Package.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 5 JBS V2 systems.</p> <p>(d) Joint Base Station Variant 3 (JBS V3). Formerly Fixed Base Station, is a man-transportable, multi-function transit case headquarters base station communications system which provides Naval Special Warfare commanders the ability to monitor and coordinate nearby land and sea operations. The JBS V3 upgrades the former system with state-of-the-art communications.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 5 JBS V3 systems.</p> <p>(e) Joint Base Station Variant 4 (JBS V4). Formerly Modular Communications Package, is a modularized man-transportable integrated transit case communications system that provides Naval Special Warfare commanders with a variety of scaleable communications capabilities at ashore and afloat locations..</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 3 JBS V4 systems and upgrades 3 existing modular communication systems to the JBS V4 configuration.</p> <p>10. Theater Special Operation Commands (SOC). Theater SOC Contingency Communication Support provides for an organic, initial, rapid response and sustained contingency communication support package. This capability is required to support the deployed SOC element prior to the establishment of and transition to a Joint Special Operations Task Force (JSOTF). The goal is to provide the SOC with communications systems that can be supported with their present manpower capability. These systems will also allow the SOC to comply with the SOF architecture by buying systems that will interface with the other assets of the infosphere. Program concluded in FY 1996.</p>		

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EXHIBIT P-40 Budget Item Justification Sheet

BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS		
ABOVE OPERATIONAL ELEMENT (GARRISON)			
<p>11. Command, Control, Communications Computers and Intelligence Automation System (C4IAS). Beginning in FY 98, C4IAS consolidates and migrates SOF C4I automation systems to a Joint C4I Automation System that will provide a seamless, interoperable and easy to use automation environment for the headquarters USSOCOM, component commands, and the theater SOC users to support SOF worldwide. It will provide accurate and timely information, analysis and planning tools. The Joint SOF C4I Automation System will fulfill a wide range of requirements ranging from command and control, office automation to decision-making assistance, mission analysis, as well as planning and execution support. The implementation of state-of-art hardware, software and communications technology will provide the SOF user community with the best, most efficient means to effectively satisfy SOF information and planning needs. Migration objectives include compliance with Defense Information Infrastructure (DII) Common Operating Environment (COE), collateralization, upgraded network communications backbone, tactical extensions and national systems. Legacy systems include USSOCOM LAN/WAN, NAVSPECWARCOM LAN, AFSOC LAN, Special Tactics Network (STN), Army Special Operations Command Network (ASOCNET), SOF Logistics and Acquisition Management System (SLAMS), and Command Planning Database (CPD), Special Mission Unit (SMU) network, and Defense Simulation Internet (DSI). The acquisition strategy is to use existing government contracts to obtain required software and hardware upgrades through a structured evolutionary technology insertion process.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Begin procurement of hardware and software to establish the network in accordance with DII COE mandate and USSOCOM C4I Master Acquisition Plan.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Complete procurement of hardware and software establishing single network in accordance with DII COE mandate and USSOCOM C4I Master Acquisition Plan.</p> <p>12. SCAMPI. SCAMPI is a telecommunications system for the dissemination of Command, Control, Communications and Intelligence</p>			

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS		
<p>(C3I) information among USSOCOM, its components and their major subordinate units, and selected Government agencies and activities directly associated with the Special Operations (SO) community. SCAMPI is the principal C3I medium for USSOCOM. SCAMPI provides gateway service for the SO community to external Department of Defense (DoD) classified voice, data and Video Teleconferencing (VTC) systems. Transmission of data between SCAMPI nodes is over leased T1 and Fraction T1 (FT1) lines. SCAMPI carries collateral (red) and Sensitive Compartmented Information (SCI) (gray) voice and data. Voice and data information are integrated into data streams using multiplexers. USSOCOM has developed a Deployable SCAMPI capability. It provides a deployed SOF HQ (down to/FOB/AFSOD/NSWTU levels) with simultaneous multimedia capability (digital and analog voice, asynchronous and synchronous data, ethernet Local Area Network (LAN) and Integrated Systems Digital Network (ISDN) switched VTC) and connectivity among SOF, national, DoD common user, and theater communications links through a SCAMPI tactical gateway.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Funds the relocation of 3 HUBs, migration of 4 HUBs to asynchronous transfer mode (ATM), and upgrades 1 integrated digital network exchange. Procures 1 tactical gateway for the United States Army Special Operations Command.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 3 deployable nodes and 1 tactical gateway for Special Operations Command Pacific. Upgrades 10 garrison nodes with ATM. Funds evolutionary acquisition technology insertions for 10 deployable nodes and 2 HUBs.</p> <p>13. Video Teleconferencing (VTC). VTC phase 1 provides capability to access the Defense Commercial Telecommunications Network (DCTN) and Joint Worldwide Intelligence Communications System (JWICS) through a gateway located at USSOCOM and video teleconferencing capability linking HQ USSOCOM with component commands. VTC provides positive command and control through face to face secure communications. System consists of VTC units, bridges, bandwidth managers and document cameras. In addition, 2 deployable packages are available to support deployment requirements. Phase 2 will extend the capability to Theater SOCs.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 3 fixed sites for SOCs and access at 3 sites to the Defense Commercial</p>		

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EXHIBIT P-40 Budget Item Justification Sheet

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS		
<p>Telecommunications Network.</p> <p>14. Headquarters Command, Control, Communications, Computers, and Information (HQ C4I) systems. HQ C4I supports a variety of Headquarters USSOCOM C4I requirements to include the Defense Message System (DMS) and the Systems Readiness Center (SRC). The DMS is a DoD program to capitalize on existing communication circuitry and emerging technology to meet requirements for secure, accountable, and reliable, writer-to-reader messaging at reduced cost. DMS incorporates state of art messaging, directory, security, and management technologies. Implementation of DMS will allow phase out of obsolete Automatic Digital Network (AUTODIN) technologies and incompatible, unsecured electronic mail systems. The SRC provides comprehensive, responsive, and proactive support to USSOCOM network users. The SRC will monitor and control the SCAMPL, Headquarters LAN/WAN and other network operations from a primary and a secondary control node.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures hardware and software to support 400 DMS users and procures integrated digital network exchange multiplexers, network diagnostic/management equipment, and associated software for SRC from existing government contracts.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures hardware and software to support 200 DMS users and procures integrated digital network exchange multiplexers, network diagnostic/management equipment, and associated software for SRC.</p>		



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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Other Procurement				A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2				B. Line Item Nomenclature COMMUNICATIONS EQUIPMENT & ELECTRONICS								C. DATE: FEBRUARY 1997		
Weapon System Cost Elements (\$ thousands)	Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999							
		Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost					
1. SPECIAL MISSION RADIO SYSTEM (SMRS)	A																	
A. Manpack Radio (MPR) Hardware							25.462	500	12,731		27.078	115	3,114					
B. Vehicle Kits							14.869	130	1,933		15.833	90	1,425	16,450	160	2,632		
C. Transportable Base Stations (TBS)							133.444	9	1,201		142.000	6	852	147,833	6	887		
D. SMRS Upgrades (MPRs)							5.046	435	2,195		5.375	240	1,290	5,475	690	3,778		
E. SMRS Upgrades (TBS)							55.000	10	550		8.833	18	159	11,345	29	329		
F. Production Support									937				557			351		
Subtotal									19,124				7,397			7,977		
2. NSW Tactical Radio System	A																	
A. Hardware							49.960	25	1,249		56.385	13	733					
B. Program Management Support									1,249				73			36		
Subtotal													73			36		
3. MBMMR	A																	
A. Manpack Hardware											22.993	150	3,449	23,736	182	4,320		
B. Vehicular Hardware											28.000	130	3,640	28,739	130	3,736		
C. Initial Cadre Training													283			322		
D. Production Support													709			805		
Subtotal									0				8,081			9,183		
4. Aircraft Wireless Intercom System (AWIS)	A																	
A. 3 Person											13.690	174	2,382					
B. 6 Person (LRIP)							49.625	8	397									
B. 6 Person							28.476	103	2,933		28.482	54	1,538					
C. Ancillary Equipment								VAR	178				180					
Subtotal									3,508				4,100					
5. MBTR	A																	
A. Hardware																		

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (8-5) - Other Procurement	A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2		B. Line Item Nomenclature COMMUNICATIONS EQUIPMENT & ELECTRONICS						C. DATE: FEBRUARY 1997	
	Ident.	FY 1996	FY 1997						FY 1999	
B. Initial Cadre Training								157		78
C. Production Support								393		197
Subtotal								4,475		2,244
6. CONDOR	A									
A. Handsets							1,620	400	648	1,152
B. Cell Site							1,168,000	1	1,168	1,168
C. Initial Cadre Training									72	93
D. Production Support									182	232
Subtotal									2,070	2,645
7. AN/PRC-117D(V2)	A									
A. Hardware		27,367	30	821						
Subtotal				821						
8. SOFTACS	A									
A. Hardware		3,859,000	4	15,436			2,809,000	5	14,045	2,809,000
B. Production Test					1771					4
C. Fielding					470				473	
B. Production Support					1,343					
Subtotal				15,436	3,584				14,518	14,257
9. JOINT BASE STATION	A									
B. Variant 1 Hardware		2,450,000	2	4,900	2,020,000	4	8,080	2,080,000	4	8,364
Variant 1 Transit Case Hardware		652,000	1	652	652,000	2	1,304	652,000	2	
C. Variant 2 Hardware		601,000	2	1,202	816,000	2	1,632			5
D. Variant 3 Hardware										8,070
E. Variant 4 New Hardware										5
Variant 4 Upgrade Hardware										3
9. JOINT BASE STATION (Contd)										3
F. Evolutionary Technology Insertion				1,483			2,123		2,196	2,970
Subtotal				8,237			13,139		11,820	28,594

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Other Procurement	A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2		B. Line Item Nomenclature COMMUNICATIONS EQUIPMENT & ELECTRONICS				C. DATE: FEBRUARY 1997	
			FY 1996		FY 1997		FY 1998	
	Ident.							
10. THEATER SOCS	A							
A. Hardware		343	VAR					
Subtotal		343						
11. SOF CMA	A							
A. Hardware		4,265	VAR			2,431		1,361
Subtotal		4,265				2,431		1,361
12. SCAMPI	A							
A. Deployable Nodes							532,000	3 1,596
B. Hub Relocations						783,333	3 2,350	
C. Hub ATM Migration						250,000	4 1,000	10 2,188
D. Gateways						1,500,000	1 1,500	1 720
E. Technology Insertions		863	VAR			805,000	1 805	
Subtotal		863					5,655	4,504
13. VTC	A							
A. Site Hardware/Software							150,000	3 450
B. Access Hardware/Software							222,000	3 666
Subtotal								1,116
14. HQ CMI	A							
A. Hardware						2,215	400	200 659
Subtotal							886	659
LINE ITEM TOTAL		35,272			40,680	57,406		72,576

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
1. SPECIAL MISSION RADIO SYSTEM (SMRS)										
A. MANPACK RADIO HARDWARE (SMRS)										
FY 97	500	25.462	NSMA	MAY 96	OPTION	CLASSIFIED	JAN 97	SEP 97	YES	
FY 98	115	27.078	NSMA		OPTION	CLASSIFIED	DEC 97	AUG 98	YES	
B. VEHICLE KITS										
FY 97	130	14.869	NSMA	MAY 96	OPTION	CLASSIFIED	MAY 97	NOV 97	YES	
FY 98	90	15.833	NSMA		OPTION	CLASSIFIED	DEC 97	MAY 98	YES	
FY 99	160	16.450	NSMA		OPTION	CLASSIFIED	DEC 98	APR 99	YES	
C. TRANSPORTABLE BASE STATION (TBS)										
FY 97	9	133.444	NSMA	MAY 96	OPTION	CLASSIFIED	JAN 97	SEP 97	YES	
FY 98	6	142.000	NSMA		OPTION	CLASSIFIED	DEC 97	AUG 98	YES	
FY 99	6	147.833	NSMA		OPTION	CLASSIFIED	DEC 98	AUG 99	YES	
D. SMRS UPGRADE (MPRS)										
FY 97	435	5.046	NSMA	N/A	MIPR	NSMA	N/A	MAR 98	NO	
FY 98	240	5.375	NSMA		MIPR	NSMA	N/A	DEC 98	NO	
FY 99	690	5.475	NSMA		MIPR	NSMA	N/A	MAY 99	NO	
E. SMRS UPGRADE (TBS)										
FY 96	10	55.000	NSMA	N/A	MIPR	NSMA	N/A	JAN 97	YES	
FY 97	20	6.350	NSMA		MIPR	NSMA	N/A	MAR 98	NO	
FY 98	18	8.833	NSMA		MIPR	NSMA	N/A	DEC 98	NO	
FY 99	29	11.345	NSMA		MIPR	NSMA	N/A	MAY 99	NO	

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EXHIBIT P-5A Procurement History and Planning

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
3. MBMMR										
A. MANPACK HARDWARE										
FY 98	150	22.993	USSOCOM		OPTION	UNKNOWN	NOV 97	JUL 98	NO	JAN 97
FY 99	182	23.736	USSOCOM		OPTION	UNKNOWN	NOV 98	MAR 99	NO	JAN 97
B. VEHICULAR HARDWARE										
FY 98	130	28.000	USSOCOM	JAN 97	OPTION	UNKNOWN	NOV 97	APR 98	NO	JAN 97
FY 99	130	28.739	USSOCOM		OPTION	UNKNOWN	NOV 98	DEC 98	NO	JAN 97
5. MBITR										
A. HARDWARE										
FY 98	730	5.377	USSOCOM	AUG 97	OPTION	UNKNOWN	MAY 98	OCT 98	NO	AUG 97
FY 99	375	5.251	USSOCOM		OPTION	UNKNOWN	NOV 98	JUL 99	NO	AUG 97
6. CONDOR										
A. CELLULAR PHONES										
FY 98	400	1.620	UNKNOWN	FEB 98	C/FP	UNKNOWN	JUN 98	DEC 98	YES	
FY 99	711	1.620	UNKNOWN		OPTION	UNKNOWN	NOV 98	JUL 99	YES	
B. GATEWAYS										
FY 98	1	1,168.000	UNKNOWN	FEB 98	C/FP	UNKNOWN	JUN 98	DEC 98	NO	JAN 98
FY 99	1	1,168.000	UNKNOWN		OPTION	UNKNOWN	NOV 98	FEB 99	NO	JAN 98

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EXHIBIT P-5A Procurement History and Planning

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVISED AVAIL
8. SOFTACS										
A. HARDWARE										
FY 96	4	3,859,000	PM/SATCOM	NOV 95	C/FP	Raytheon Marlboro, MA	AUG 96	APR 98	YES	
FY 98	5	2,809,000	PM/SATCOM		OPTION	Raytheon Marlboro, MA	JUN 98	MAR 99	NO	MAY 98
FY 99	4	2,809,000	PM/SATCOM		OPTION	Raytheon Marlboro, MA	FEB 99	AUG 99	NO	MAY 98
9. JBS										
B. V1 HARDWARE										
FY 96	2	2,450,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	AUG 97	YES	
FY 97	4	2,020,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	DEC 98	YES	
FY 98	4	2,080,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	APR 99	YES	
FY 99	4	2,091,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	APR 00	YES	
V1 TRANSIT CASE HDW										
FY 96	1	652,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	AUG 97	YES	
FY 97	2	652,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	DEC 98	YES	
FY 98	2	652,000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	APR 99	YES	

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
C. V2 HARDWARE										
FY 96	2	601.000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	FEB 97	YES	
FY 97	2	816.000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	DEC 98	YES	
FY 99	5	1,614.000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	AUG 99	YES	
D. V3 HARDWARE										
FY 99	5	302.000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	NOV 99	YES	
E. V4 NEW HARDWARE										
FY 99	3	1,680.000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	NOV 99	YES	
V4 UPGRADE HARDWARE										
FY99	3	880.000	NAWC-AD		MIPR	NAWC-AD St. Inigoes, MD	N/A	NOV 99	YES	
12. SCAMPI										
A. DEPLOYABLE NODES										
FY 99	3	532.000	CECOM		CPFF	UNKNOWN	NOV 98	MAR 99	YES	
B. HUB RELOCATION										
FY 98	3	783.333	CECOM		CPFF	UNKNOWN	NOV 97	MAR 98	YES	

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE COMMUNICATIONS EQUIPMENT & ELECTRONICS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	REP ISSUE DATE	CONTRACT METHOD	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
C. HUB ATM MIGRATION										
FY 98	4	250.000	CECOM		CPFF	UNKNOWN	NOV 97	MAR 98	YES	
FY 99	10	218.800	CECOM		CPFF	UNKNOWN	NOV 98	MAR 99	YES	
D. TACTICAL GATEWAY										
FY 98	1	1500.000	CECOM		CPFF	UNKNOWN	NOV 97	MAR 98	YES	
FY 99	1	720.000	CECOM		CPFF	UNKNOWN	NOV 98	MAR 99	YES	
E. TECHNOLOGY INSERTIONS										
FY 98	1	805.000	CECOM		MIPR	UNKNOWN			YES	
13. VIDEO TELECONFERENCING										
A. SITE HARDWARE/SOFTWARE										
FY 99	3	150.000	USSOCOM		CFP	UNKNOWN	MAR 99	JUN 99	NO	FEB 99
B. ACCESS HARDWARE/SOFTWARE										
FY 99	3	222.000	USSOCOM		OPTION	UNKNOWN	MAR 99	JUN 99	NO	FEB 99
14. HQ C4I										
A. HARDWARE/SOFTWARE										
FY 98	400	2.215	DISA		MIPR	DISA	N/A	NOV 99	YES	
FY 99	200	3.295	DISA		MIPR	DISA	N/A	AUG 00	YES	

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BUDGET ITEM JUSTIFICATION SHEET		DATE		FEBRUARY 1997				
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions \$)	25.979	19.846	21.175	21.188	23.823	30.876	25.215	15.575
<p><b>MISSION AND DESCRIPTION:</b> This budget line includes all Special Operations Forces (SOF) intelligence requirements under one procurement program. Examples of systems procured are Joint Deployable Intelligence Support System-Special Operations Command, Research, Analysis and Threat Evaluation System, SOF Intelligence Vehicle, Multi-mission Advanced Tactical Terminal, SILENT SHIELD, Integrated Survey Program, SOF Signal Intelligence Manpack System and PRIVATEER. Provides equipment for the Theater Special Operations Commands.</p> <p>USSOCOM has developed an overall strategy to ensure that Command, Control, Communications, Computers, and Intelligence (C4I) systems continue to provide SOF with the required capabilities into the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and the timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture will employ the latest standards and technology by transitioning from separate systems to full integration with the infosphere. The infosphere will allow SOF elements to operate with any force combination in multiple environments. The C4I programs funded in this procurement line are grouped by the level of organizational element they support: Operational Element (Team), Above Operational Element (Deployed) and Above Operational Element (Garrison).</p>								

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS	FEBRUARY 1997
<p><b><u>OPERATIONAL ELEMENT (TEAM)</u></b></p> <p>1. Multi-mission Advanced Tactical Terminal (MATT). Program enables combat forces to directly receive near-real-time operational intelligence products and threat information to support mission planning, updates, and execution. The program integrates MATT capabilities with command, control, communications, and intelligence systems. Procurement and fielding of MATT will address the primary requirement for situational awareness during infiltration and exit from operating areas.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procure 16 MATT units for integration onboard the MH-53J rotary wing aircraft. Integration is funded under SOF Rotary Wing Upgrades. Will also provide Joint Tactical Terminal Engineering Change Proposal.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procure 13 MATT units for integration onboard the MH-53J rotary wing aircraft. Integration is funded under SOF Rotary Wing Upgrades. Will also provide Joint Tactical Terminal Engineering Change Proposal.</p> <p>2. SILENT SHIELD. The program is part of an evolutionary Joint Threat Warning System (JTWS) migration being developed to support Special Operations Forces (SOF)-wide operations. System development emphasizes a rapid prototyping effort to develop, test, and field systems that provide direct threat warning and enhanced situational awareness data to SOF aircrews at the Collateral SECRET level.</p> <p>3. Integrated Survey Program (ISP). Program provides for evolutionary technology insertions for 11 Data Collection Systems (DCS) to be fielded to each theater and special survey team. DCSs will consist of laptop and desktop computers with software to assist in data collection, digital cameras, 8mm video cameras, global positioning system receivers, and laser rangefinders.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Technology insertions to the 11 ISP DCS. Upgrade DCS 8mm video cameras to digital video cameras. Incorporate data encryption software into laptops and computers.</p>		

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Page 2 of 6 Pages  
EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS		
<p>FY 1999 PROGRAM JUSTIFICATION: Technology insertions and upgrades to the 11 Integrated Survey Program Data Collection Systems (DCS). Replace DCS laptop and desktop computers with newer technology incorporating faster processors, expanded memory and capability to interface with Digital Video Disk technology.</p> <p>4. PRIVATEER. PRIVATEER is part of an evolutionary signal intelligence system migration and acquisition program that provides a permanent full spectrum Radar and Communications Early Warning capability aboard Cyclone-Class Patrol Coastal (PC) and MK-V Special Operations Craft (SOC). The PC configuration is confined to the Electronic Surveillance (ES) mission area, while the MK-V SOC configuration has been expanded to include an Electronic Attack (EA) capability for self-defense. A subset of the Joint Threat Warning System, it hosts a common software architecture that controls a variety of hardware modules designed to satisfy the unique platform requirements of each ship class. System configuration provides the equipment necessary to monitor and provide direction finding on radar and communications signals of interest. Also provides broadcast threat warning capabilities. Architecture is Joint Deployable Intelligence Support System/Joint Maritime Communications and Intelligence Support System compliant with UNIX-based software.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures the remaining four ES systems supporting the PC configuration and the first five systems supporting the MK V SOC.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures five ES and ten EA systems for the MK V SOC and provides training equipment for the PCs.</p> <p><u>ABOVE OPERATIONAL ELEMENT (DEPLOYED)</u></p> <p>5. Special Operations Forces Intelligence Vehicle (SOF IV). The SOF IV is a deployable, automated, multi-source intelligence processing and dissemination system. The SOF IV extends the Joint Deployable Intelligence Support System/Special Operations Command, Research,</p>			

P-1 SHOPPING LIST, ITEM NO. 64

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EXHIBIT P-40 Budget Item Justification Sheet

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BUDGET ITEM JUSTIFICATION SHEET		DATE
		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS	
<p>Analysis and Threat Evaluation System architecture to the Joint Special Operations Task Force level permitting automated interface to all theater-level intelligence data handling systems. Special Operations Forces Intelligence Vehicle provides for the receipt, processing, and manipulation of near-real-time intelligence data in order to produce highly tailored, accurate and timely intelligence products to support deployed SOF. The system employs a high mobility multi-purpose wheeled vehicle configured with a rigid wall, standard integrated command post shelter to house computer servers, mass storage devices, and communications equipment, and a tent extension for the remote operation of analyst workstations. It incorporates DOD Intelligence Information System and JDISS standards and products in accordance with JCS direction. A second configuration of the system also exists with identical performance capabilities using a modular, transit case design.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Begin production engineering efforts for evolutionary technology insertions to achieve non-SCI network operational capabilities as well as achieve compliance with Defense Information Infrastructure Common Operating Environment mandates.</p> <p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Continue production engineering tasks for evolutionary technology insertions and procure initial spares.</p> <p>6. Theater Special Operations Commands (SOCs). USSOCOM is responsible to ensure that SOCEUR, SOCSOUTH, SOCPAC, SOCLANT, SOCCENT, and SOC-K are supported and provided with intelligence processing and dissemination systems consistent with Command Intelligence Architecture Plans. Intelligence capabilities are annually assessed and acquisition strategies adjusted to accommodate unique intelligence requirements within each Theater. Program ends in FY 1996.</p> <p><b>NOTE:</b> The Joint Deployable Intelligence Support System-Special Operations Command Research, Analysis and Threat Evaluation System (JDISS-SOCRATES) is planned for this level as well as capabilities to receive broadcast threat warning data.</p>		

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 EXHIBIT P-40 Budget Item Justification Sheet

BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS		
<p><u>ABOVE OPERATIONAL ELEMENT (GARRISON)</u></p> <p>7. Joint Deployable Intelligence Support System-Special Operations Command Research, Analysis and Threat Evaluation System (JDISS-SOCRATES) Program. The JDISS-SOCRATES program provides a wide range of mission-directed automated intelligence and imagery support to USSOCOM and components and extension to USSOCOM mission support units, Theater Special Operations Commands, and forward-deployed SOF. JDISS-SOCRATES is a UNIX-based, client server architecture which allows single workstation access to the databases and provides secure, on-line services to remote sites via SCAMPI (a secure communications distribution system) and the Joint Worldwide Intelligence Communications System. Much of the data is acquired from national intelligence assets/databases and tailored to SOF needs. JDISS-SOCRATES provides near-real-time intelligence to the SOF community. JDISS-SOCRATES capabilities include data processing, secure voice/video conferencing, news and message traffic, video mapping, soft copy imagery processing and secondary imagery dissemination. This program ensures SOF interoperability and connectivity with Theater, Service, and national intelligence systems.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Begin evolutionary technology insertions and ensure compliance with Defense Information Infrastructure (DII) Common Operating Environment (COE) mandates. Includes extension of network to Civil Affairs units.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Continue evolutionary technology insertions.</p> <p>8. SOF Signal Intelligence (SIGINT) Manpack System (SSMS). The SSMS is designated evolutionary and assigned the nomenclature AN/PRD-13. It is part of an evolutionary SIGINT system migration and acquisition program that provides a permanent full spectrum Communications Early Warning capability to ground, maritime and air components of the SOF. Program acquires manpackable, lightweight communications early warning and direction finding systems that weigh less than 45 pounds and fit within an Alice pack. Initial acquisition provided NDI capability that has now been substantially improved to reduce weight and power while significantly improving capability through multiple receivers and reduced numbers of antennas. Premier system within SOF whose capability has been expanded to</p>		



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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997					
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS							
support the unique platform requirements of maritime and airborne platforms. Migrates into the Joint Threat Warning System.								
FY 1998 PROGRAM JUSTIFICATION: Initiates Evolutionary Technology Insertions (ETIs) for 55 existing SOF Signal Intelligence Manpack System (SSMS).								
FY 1999 PROGRAM JUSTIFICATION: ETIs for 56 SSMS.								
MODIFICATIONS SUMMARY								
DESCRIPTION	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
Multi-Mission Advanced Tactical Terminal (MATT)*	5.160	9.823	2.389	1.969				
PRIVATEER (MK V)			3.086	6.512	6.509	3.181		
PRIVATEER (Patrol Coastal)	8.555		6.857	.606				
TOTAL	13.715	9.823	12.332	9.087	6.509	3.181	0.000	0.000
* Beginning in FY98, the procurement dollars for integration of the MATT on to the MH-53J are located in P-1 line item SOF Rotary Wing Upgrades.								

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Other Procurement				A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Inst./2				B. Line Item Nomenclature SOF INTELLIGENCE SYSTEMS						C. DATE: FEBRUARY 1997		
Weapon System Cost Elements (\$ thousands)		Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999				
			Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost		
1. MATT		A														
A. Prime Mission Equipment (MATT) (See P3A)			122,417	12	1,469					149,313	16	2,389	151,462	13	1,969	
B. Production Engineering					5,239			2,860				2,381			944	
C. MH-53J Modification Costs (See P3A)					3,691			9,823								
D. Prime Mission Equipment (BMATT)						200,000	5	1,000								
Subtotal					10,399			13,683				4,770			2,913	
2. SILENT SHIELD		A														
A. Prime Mission Equipment						673,400	5	3,367								
3. INTEGRATED SURVEY PROGRAM (ISP)		A														
A. System Upgrades					200			193				380			389	
4. PRIVATEER		A														
A. Patrol Coastal			1,711,000	5	8,555				1,714,250	4	6,857				606	
B. MKV (ES)									617,200	5	3,086	602,400	5	3,012		
C. MKV (EA)												350,000	10	3,500		
Subtotal					8,555			0			9,943			7,118		
5. SOF IV		A														
A. Production Engineering					434										738	
B. Evolutionary Technology Insertions											200				1,882	
Subtotal					434						200				2,620	
6. SOCRATES		N/A														
A. DOS to UNIX Transition					5,705			2,603								
B. POAS					504							841			1,625	
C. National Systems Migration					182											
D. Evolutionary Technology Insertions											2,029				3,449	
Subtotal					6,391			2,603			2,870				5,074	
7. SSMS		A														
A. Production Engineering											3,012				3,074	
LINE ITEM TOTAL					25,979			19,846			21,175				21,188	

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2			C. P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. MATT										
A. PRIME MISSION EQUIPMENT (MATT)										
FY 96	12	122,417	USSOCOM	N/A	OPTION	AlliedSignal Towson, MD	AUG 96	AUG 97	YES	
FY 98	16	149,313	USSOCOM	N/A	OPTION	AlliedSignal Towson, MD	DEC 97	DEC 98	YES	
FY 99	13	151,462	UNKNOWN	N/A	UNKNOWN	UNKNOWN	DEC 98	DEC 99	YES	
D. PRIME MISSION EQUIPMENT (BMATT)										
FY 97	5	200,000	USSOCOM	N/A	OPTION	AlliedSignal Towson, MD	MAR 97	DEC 97	YES	
2. SILENT SHIELD										
A. PRIME MISSION EQUIPMENT										
FY 97	5	673,400	DET 2, WPAFB, OH	APR 97	C/FPF	UNKNOWN	MAY 97	OCT 97	YES	
4. PRIVATHER										
A. PATROL COASTAL										
FY 96	5	1,711,000	NISE-E	JAN 96	SS/CPFF	Advanced Research Corp. G.R.C. Charleston, SC	MAR 96	SEP 96	YES	
FY 98	4	1,714,250	NISE-E	N/A	OPTION	S.R.C. Charleston, SC	OCT 97	JUN 98	YES	
B. MKV (ES)										
FY 98	5	617,200	NISE-E	N/A	OPTION	S.R.C. Charleston, SC	OCT 97	JUN 98	YES	

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: September 1996			
B. APPROPRIATION/BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE/2							C. P-1 ITEM NOMENCLATURE SOF INTELLIGENCE SYSTEMS			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPEC AVAIL NOW?	DATE REVIS AVAIL
4. PRIVATEER (Cont'd)										
B. MKV (ES) (Cont'd) FY 99	5	602.400	NISE-E	N/A	OPTION	S.R.C Charleston, SC	OCT 98	JUN 99	YES	
C. MKV (EA) FY 99	10	350.000	NISE-E	N/A	OPTION	S.R.C. Charleston, SC	OCT 98	JUN 99	YES	
D. REMARKS:										

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DATE: FEBRUARY 1997

INDIVIDUAL MODIFICATION  
MODIFICATION TITLE: MULTI-MISSION ADVANCED TACTICAL TERMINAL (MATT)  
MODELS OF SYSTEMS AFFECTED: MH-53J  
DESCRIPTION/JUSTIFICATION:

This effort integrates the MATT onto the existing Military-Standard 1553 data bus to provide electronic order of battle information to the crew. The integration also adds a digital map system and displays. The program modifies existing computers, controls, and display systems and replaces the projected map and data transfer systems. The system architecture is targeted toward modular transportability. See Procurement Line Item SOF Rotary Wing Upgrades for integration funds and installation schedule.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Contract Restart: Feb 94; CDR: Jan 95; Trail Installation: Nov 95. (Aircraft Breakout: 0 ANG; 0 AFRES; 41 Active)

FINANCIAL PLAN: (\$ in millions)

PY's	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
2.9											

RDT&E

PROCUREMENT

Installation Kits	12	1.5									12	1.5
Install Kits Nonrecurring		.6									0	0.6
Equipment			5.9								0	5.9
Equipment Nonrecurring		2.3									0	2.3
Engineering Change Orders			2.0								0	2.0
Data		8.6									0	8.6
Support/Training Equipment		1.0		2.1							0	3.1
Software		3.1	.5	1.4							0	5.0
Interim Contractor Support			.3	.3							0	0.6
Government Furnished Equipment	12	1.5		16	2.4	13	2.0				41	5.9
Installation of Hardware												

FY96											0	0.0
FY97											0	0.0
FY98											0	0.0
FY99											0	0.0
FY00											0	0.0
FY01											0	0.0
FY02											0	0.0
FY03											0	0.0
To Complete											0	0.0
Total Installation Cost	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Total Procurement Cost

15.6 0.5 5.2 9.8 2.4 2.0 0.0 0.0 0.0 0.0 0.0 35.5

METHOD OF IMPLEMENTATION:

CONTRACT DATE:

DELIVERY DATE:

DEPOT AND DEPOT FIELD TEAM

Current Year: 02/97

Current Year: N/A

ADMINISTRATIVE LEADTIME: 6 MONTHS

Budget Year 1: 01/98

Budget Year 1: 02/98

PRODUCTION LEADTIME: 1 MONTH

Budget Year 2: 01/99

Budget Year 2: 01/99

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**INDIVIDUAL MODIFICATION**  
**MODIFICATION TITLE: PRIVATEER (MKV)**

DATE: FEBRUARY 1997

**MODELS OF SYSTEMS AFFECTED: MKV**

**DESCRIPTION/JUSTIFICATION:** PRIVATEER is part of an evolutionary signals intelligence systems migration and acquisition program. As a permanent ship board installation, it provides a full spectrum, passive electronic warfare capabilities for communications and radar early warning. Also includes an electronic attack capability for "ownership" self-defense.

### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

PNP. Aug 96: CDR: Oct 96: 1st trial install: 2nd Qtr FY97: 1st production install: 3rd Qtr FY98

**FINANCIAL PLAN: (\$ in millions)**[illegible]

## RDT&amp;E

## PROCUREMENT

[illegible]

Quantities are number of Electronic Surveillance/Electronic Attack (ES/EA) Systems.

Total Procurement Cost

### METHOD OF IMPLEMENTATION:

**CONTRACTOR/GOVERNMENT**

CONTRACT DATE: **Current Year: N/A**

**Budget Year 1: 10/97**

**Budget Year 2: 02/97**

**DELIVERY DATE:**

**Budget Year 1: 04/98**

**Budget Year 2: 08/98**

**P-1 SHOPPING LIST, ITEM NO. 64**

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**PRODUCTION LEADTIME: 6 MONTHS**

**PRODUCTION LEADTIME:**

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PRIVATEER (MKV)

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In								5/0				5/10				5/10	
Out								5/0				5/10				5/10	

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In			5/0											20/20
Out			5/0											20/20

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## INDIVIDUAL MODIFICATION

MODIFICATION TITLE: PRIVATEER (PATROL COASTAL)

MODELS OF SYSTEMS AFFECTED: Patrol Coastal

DESCRIPTION/JUSTIFICATION: PRIVATEER is part of an evolutionary signals intelligence systems migration and acquisition program. As a permanent ship board installation, it provides a full spectrum, passive electronic warfare capability for communications and radar early warning.

DATE: FEBRUARY 1997

## DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

SOW: Development: May 94; Production: Oct 95; CCB: May 96; MS III: FY 96

FINANCIAL PLAN: (\$ in millions)

FYs		FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		TOTAL	
Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	3.6				1.0																	0	4.6
																						0	0.0

## RDT&amp;E

## PROCUREMENT

Installation Kits	1			5	.2**	4	.2															10	0.4
Installation Kit Nonrecurring																						0	0.0
Equipment		1	*	5	8.1**	4	6.5															10	14.6
Equipment Nonrecurring																						0	0.0
Support Equipment																						0	0.0
Training Equipment																						0	0.6
Interim Contractor Support																						0	0.0
																						0	0.0
																						0	0.0

## Installation of Hardware

PY	1																						1	0.0
FY96				5	.3																	5	0.3	
FY97																						0	0.0	
FY98						4	.2															4	0.2	
FY99																						0	0.0	
																						0	0.0	
																						0	0.0	
To Complete																						0	0.0	

\* Prototype.

\*\* Three additional systems funded in Maritime Equipment Mod Line Item (FY 96 procurement). Total units procured equal 13.

Total Procurement Cost

0.0 0.0 8.6 0.0 6.9

METHOD OF IMPLEMENTATION:

CONTRACTOR/GOVERNMENT

ADMINISTRATIVE LEADTIME: 3 MONTHS PRODUCTION LEADTIME: 8 MONTHS

CONTRACT DATE:

Current Year: N/A

Budget Year 2: N/A

DELIVERY DATE:

Current Year: N/A

Budget Year 1: 11/97

Budget Year 2: N/A

P-1 SHOPPING LIST, ITEM NO. 64

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Exhibit P-3a, Individual Modification (Continued)

MODIFICATION TITLE: PRIVATEER (PATROL COASTAL)

INSTALLATION SCHEDULE

	PYs	1997				1998				1999				2000			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	6								4								
Out	6								4								

	2001				2002				2003				To Complete	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
In														10
Out														10



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BUDGET ITEM JUSTIFICATION SHEET		DATE							
		FEBRUARY 1997							
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS							

**MISSION AND DESCRIPTION:** Provides small arms and combat equipment in support of SOF. These forces include Rangers, special forces groups, special boat units, special warfare groups, special warfare units, SEAL teams, special boat squadrons and SEAL delivery vehicle teams. A variety of SOF small arms and combat equipment are procured through this budget line, including: Navy small arms and weapons and support equipment; M4A1 Carbine; M4A1 Special Operations Peculiar Modification (SOPMOD) Accessory Kits and support equipment; MK 23 MOD 0 SOF Offensive Handgun; SOF Laser Marker (SOFLAM), SOF Personal Equipment Advanced Requirements (SPEAR), Heavy Sniper Rifle (HSR), Advanced Design Night Vision Devices (NVD), Lightweight Thermal Imager (LTI), Improved Night/Day Observation Device (INOD) and Parachute Offset Oxygen System (POOS).

1. Naval Special Warfare Peculiar Weapons. Provides a variety of support equipment, replacement weapons, parts, and standoff weapons. Also provides support equipment such as gun mounts, stands, and installation kits for boat backfit or modification; purpose code replacement and/or follow-on procurement of unique weapons to maintain inventory; and anti-material weapons for extended ranges.

**FY 1998 PROGRAM JUSTIFICATION:** Procures 77 MK 93 boat gun mounts. Procurement of replacement parts to support weapons inventory.

**FY 1999 PROGRAM JUSTIFICATION:** Procures 110 MK 93 boat gun mounts. Reprourement of replacement weapons (450 MP5 submachine guns). Procurement of replacement parts to support weapons inventory.

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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS		
<p>2. MK 23 MOD 0 SOF Offensive Handgun System. Program consists of a .45 caliber handgun, noise/flash suppressor, and laser aiming module. The system improves upon currently available handguns by providing increased reliability, accuracy, and offensive incapacitation capability.</p> <p>3. SOF Weapons Mods and Support Equipment. Provides weapons and associated equipment with a variety of enhanced capabilities including modification of existing weapons to accommodate items such as night vision devices and aiming modules. One such modification is the M4A1 Carbine Accessory Kit which gives the basic M4A1 Carbine various accessories to adapt it for missions across the operational spectrum. Provides for kits which consist of day scopes, night scopes, active aiming laser module, grenade launchers, lightweight grips, and an interface system to allow integration of these items with the M4A1 Carbine.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures 408 M4A1 Carbine Accessory Kits (less night scopes).</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 426 M4A1 Carbine Accessory Kits and 860 night scopes.</p> <p>4. SOF Personal Equipment Advanced Requirements (SPEAR). Integrates the development and procurement of everything the SOF operator wears, carries, and consumes. It treats the individual SOF operator as a system, and acquires SOF-unique, state of the art equipment in nine functional areas (clothing, Body Armor/Load Bearing Equipment (BA/LBE)), ballistic protection, optical protection, NBC protection, signature reduction, physiological management, target acquisition, C4I).</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures 1,053 sets of integrated BA/LBE. Body armor provides front and back protection against 5.56mm and 7.62mm threats with light weight ballistic plates. Integrated BA/LBE reduces bulk and weight of SOF operator carry load and improves operator's range of motion.</p>			

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS
<p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Procures 827 sets of integrated Body Armor/Load Bearing Equipment (BA/LBE) and 1,604 Modular Integrated Communications Helmets (MICH).</p> <p>5. Special Operations Forces Laser Acquisition Marker (SOFLAM). SOFLAM provides Special Operations Forces (SOF) with a lightweight, manportable, laser target designator and rangefinder effective out to five kilometers. SOFLAM gives SOF a standoff capability against strategic targets. SOFLAM replaces heavier, bulkier, and less reliable systems, such as the Compact Laser Designator.</p> <p>6. Stinger Thermal Sight (STS) Kit. The AN/PAS-18 (WASP) is a rugged, lightweight thermal imaging sight that mounts on the Stinger Missile round and provides a 24-hour mission capability. The sight works passively in the same infrared spectrum as the seeker and allows the gunner to perform target acquisition and weapon firing during total darkness and under reduced visibility conditions such as fog, dust, smoke, and haze.</p> <p>7. Lightweight Thermal Imager (LTI). LTI provides long range observation and fire control for small arms weapons under day/night conditions and in the presence of obscurants.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Procures 217 systems for Air Force Special Operations Command and Naval Special Warfare Command.</p> <p>8. Improved Night/Day Observation/Fire Control Device (INOD). Provides the SOF sniper with a lightweight, low signature, fire control and observation device which allows him to detect, acquire, and engage targets out to his weapon's maximum effective range under day/night conditions. Precludes the need to carry two devices (one for day operations, one for night operations). Allows the sniper to go from day to night operations without re-zeroing his sight to his weapon.</p>		

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS		
<p>FY 1999 PROGRAM JUSTIFICATION: Procures 200 Improved Night/Day Observation/Fire Control Devices (INODs) for the United States Army Special Operations Command (USASOC).</p> <p>9. Parachute Offset Oxygen System (POOS). POOS provides improved oxygen flow to military free fall jumpers executing High Altitude Low Opening (HALO) and High Altitude High Opening (HAHO) infiltrations at altitudes up to 35,000 ft. ASL. Reduces risk of injury due to insufficient pre-breathing or oxygen starvation upon exit from aircraft.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 12 pre-breathing oxygen consoles and 265 individual jumper masks for USASOC.</p> <p>10. Heavy Sniper Rifle (HSR). HSR provides SOF with a standoff engagement capability against various materiel targets such as parked aircraft, C3I sites, radar equipment, ammunition storage facilities, fuel storage facilities, and light armored vehicles. Allows SOF operators to engage materiel targets at long range before enemy security forces can react.</p> <p>11. Advanced Design Night Vision Devices (NVD). Program acquires advanced design night vision goggles and scopes for SOF ground operators (SF, Rangers, SEALs). Devices provide day/night and all-weather capability for fire control, surveillance, and land navigation through use of advanced technologies such as multi-spectral imaging, multi sensor fusion, and digital image display. Provides SOF operators with longer detection/recognition ranges under all light conditions and in the presence of man-made or natural obscurants.</p>		

P-1 SHOPPING LIST, ITEM NO. 65

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Other Procurement		A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2		B. Line Item Nomenclature SOF SMALL ARMS AND SUPPORT EQUIPMENT										C. DATE: FEBRUARY 1997		
Weapon System Cost Elements (\$ thousands)		Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999				
			Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost		
1. NSW PECULIAR WEAPONS																
A. Support Equipment		A			150					52			448			246
B. Purpose Code Weapons (MPS Sub Mach Gun)		A												1,500	450	675
C. .50 Cal Sniper Rifles		A	3,120	125	390	3,184	125	398								
D. Mounts		A	5,000	40	200	5,150	40	206	3,000	77	231	3,109	110	342	92	
E. Production Engineering		N/A			103			70			47					
Subtotal					843			726			726				1,355	
2. MK 23 MOD & SOF OFFENSIVE HANDGUN																
A. Non-recurring Cost		N/A			165											
B. Production Engineering		N/A			302			107								
C. Laser		A	0,869	650	565											
D. Suppressor		A	0,676	1,350	912											
E. Magazines		A	0,029	4,172	121											
F. Holsters & Magazine Pouches		A	0,085	635	54											
G. Spare Parts		N/A			1,128			499								0
Subtotal					3,247			606			0					
3. SOF WPNS MODS & SPT EQUIP																
A. M4 Carbine - Modified		A	0,520	1,780	926	0,520	1,779	925					283			556
B. Production Support		N/A			517			677								
C. M4 Carbine SOPMOD Kits		A	8,819	343	3,025	8,792	783	6,884	8,716	408	3,556	8,678	426	3,697	860	3,438
D. M4 Carbine Nightscopes		A												3,998		
Subtotal					4,468			8,486			3,839					7,691
4. SOF PERSONAL EQUIP ADV REQ																
A. Lightweight Cold Weather Equip		A	0,216	2,500	539											
B. Body Armor/LBE		A				2,408	120	289	2,388	1,053	2,515	2,397	827	1,982		
4. SOF PERSONAL EQUIP ADV REQ (Cont'd)																
C. Modular Integrated Comm Helmet		A												2,478	1,604	3,974
Subtotal					539			289			2,515					5,956



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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Other Procurement	A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2				B. Line Item Nomenclature SOF SMALL ARMS AND SUPPORT EQUIPMENT										C. DATE: FEBRUARY 1997		
	Ident. Code	FY 1996			FY 1997			FY 1998			FY 1999						
		Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost	Unit Cost	QTY	Total Cost				
Weapon System Cost Elements (\$ thousands)																	
5. SOF LASER ACQUISITION MARKER																	
A. Night Vision System	A	9,479	192	1,820													
B. Tripod	A				1,498	245	367										
C. Production Engineering Support	N/A			300			139										
Subtotal				2,120			506					0		0			
6. STS Kit																	
A. Program Supd/Training	N/A			35													
Subtotal				35			0					0		0			
7. LIGHTWEIGHT THERMAL IMAGER																	
A. Hardware	A							14,696	217	3,189							
Subtotal				0			0			3,189				0			
8. IMPROVED NIGHT/DAY OBSERVATION/FIRE CNTRL DEV (INOD)																	
A. Hardware	A											9,945	200	1,989			
Subtotal				0			0			0				1,989			
9. PARACHUTE OFFSET OXYGEN SYS (POOS)																	
A. Production Engineer Support	N/A																
B. Oxygen Consoles	A			0			0					13,500	12	162			
C. Individual Jumper Masks	A			0			0					4,200	265	1,113			
Subtotal				0			0			0				1,586			
LINE ITEM TOTAL				11,252			10,613			10,269				18,577			

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## FOR OFFICIAL USE ONLY

BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2					C. P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS					
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	REP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVISED AVAIL
1.NSW PECULIAR WEAPONS										
B. Purpose Code Weapons (MP5 Sub Mach Gun) FY 99	450	1.500	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	MAR 99	JAN 00		
C. .50 Cal Sniper Rifles FY 96	125	3.120	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	APR 96	SEP 96	YES	
FY 97	125	3.184	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	MAR 97	SEP 97	YES	
D. Mounts FY 96 (HK 95 Dual .50 Cal)	40	5.000	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	APR 96	SEP 96	YES	
FY 97 (HK 95 Dual .50 Cal)	40	5.150	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	MAR 97	SEP 97	YES	
FY 98 (MK 93 Tri-Purpose M60/40MM/.50cal)	77	3.000	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	MAR 98	SEP 98	YES	
FY 99 (MK 93 Tri-Purpose M60/40MM/.50cal)	110	3.109	NSWCD Crane		MIPR	NSWC Crane Div Crane, IN	MAR 99	SEP 99	YES	
2. MK 23 MOD & SOF OFFENSIVE HANDGUN										
C. Laser Aiming Module FY 96	650	.869	NSWCD Crane	MAR 96	C/FP	UNKNOWN	MAR 97	JUN 97	NO	
D. Suppressor FY 96	1,350	.676	NSWCD Crane	DEC 95	SS/FP	Knights Armament Vero Beach, FL	MAY 96	AUG 96	YES	

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BUDGET PROCUREMENT HISTORY AND PLANNING					A. DATE: FEBRUARY 1997					
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2			C. P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
2. MK 23 MOD & SOF OFFENSIVE HANDGUN (Cont'd)										
E. Magazines										
FY 96	4,172	.029	NSWCD Crane	SEP 95	OPTION Priced	Heckler & Koch Sterling, VA	NOV 95	JUN 97	YES	
F. Holsters & Magazine Pouches										
FY 96	635	.085	NSWCD Crane	JAN 96	C/FFP	Safariland Ontario, CA	FEB 96	MAY 96	YES	
3. SOF WPNS MODS & SPT EQUIP										
A. M4 Carbine - Modified (M4A1)										
FY 96	1,780	.520	U.S. Army	N/A	OPTION Priced	Colt, Inc. Hartford, CN	MAY 96	JUL 96	YES	
FY 97	1,779	.520	U.S. Army	N/A	OPTION Priced	Colt, Inc. Hartford, CN	MAY 97	JUL 97	YES	
C. M4 Carbine SOPMOD Kits										
FY 96	343	8.819	NSWC Crane	VAR	C/FP	VARIOUS	MAR 96	SEP 96	YES	
FY 97	783	8.792	NSWC Crane	VAR	C/FP	VARIOUS	MAR 97	SEP 97	NO	
FY 98	408	8.716	NSWC Crane	VAR	C/FP	VARIOUS	MAR 98	SEP 98	NO	
FY 99	426	8.678	NSWC Crane	VAR	C/FP	VARIOUS	MAR 99	SEP 99	NO	
D. M4 Carbine Night Scopes										
FY 99	860	3.998	NSWC Crane	VAR	C/FP	VARIOUS	MAR 99	SEP 99	NO	

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BUDGET PROCUREMENT HISTORY AND PLANNING					A. DATE: FEBRUARY 1997					
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2					C. P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS					
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	REP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
4. SOF PERSONAL EQUIP ADV REQ (SPEAR)										
A. Lightweight Cold Weather Equipment FY 96	2,500	.216	USA SSCOM	MAR 96	C/FP	Nat'l Institute for Severely Handicapped	AUG 96	NOV 96	YES	
B. Body Armor/LBE FY 97	120	2.408	USA SSCOM	MAY 97	C/FP	UNKNOWN	JUL 97	NOV 97	NO	
FY 98	1,053	2.388	USA SSCOM	MAY 98	OPTION Unpriced	UNKNOWN	JUL 98	NOV 98	NO	
FY 99	827	2.397	USA SSCOM	MAY 99	OPTION Unpriced	UNKNOWN	JUL 99	NOV 99	NO	
C. Modular Integrated Comm Helmet FY 99	1,604	2.478	USA SSCOM	MAY 99	C/FP	UNKNOWN	JUL 99	DEC 99	NO	
5. SOF LASER ACQUISITION MARKER (SOFLAM)										
A. Night Vision System FY 96	192	9.479	NSWC Crane	FEB 96	C/FP	Liton EO Garland, TX	SEP 96	DEC 96	YES	
B. Tripod FY 97	245	1.498	NSWC Crane	AUG 96	C/FP	UNKNOWN	FEB 97	APR 97	NO	
7. LIGHT THERMAL IMAGER FY 98	217	14.696	USA PM/NVRSTA	SEP 97	C/FP	UNKNOWN	FEB 98	OCT 98	NO	
8. IMPROVED NIGHT/DAY OBSERVATION/FIRE CONTROL DEVICE FY 99	200	9.945	USA PM/NVRSTA	NOV 97	C/FP	UNKNOWN	MAR 99	AUG 99	NO	

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BUDGET PROCUREMENT HISTORY AND PLANNING					A. DATE: FEBRUARY 1997					
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2					C. P-1 ITEM NOMENCLATURE SOF SMALL ARMS AND WEAPONS					
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
9. PARACHUTE OFFSET OXYGEN SYS										
B. OXYGEN CONCOLES										
FY 99	12	13.500	UNKNOWN	NOV 98	C/FP	UNKNOWN	MAR 99	AUG 99	NO	
C. INDIVIDUAL JUMPER MASKS	265	4.200	UNKNOWN	NOV 98	C/FP	UNKNOWN	MAR 99	AUG 99	NO	
REMARKS:										

P-1 SHOPPING LIST, ITEM NO. 65



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BUDGET ITEM JUSTIFICATION SHEET							DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF MARITIME EQUIPMENT						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (in Millions \$)	2.426	4.523	.598	2.865	12.165	11.839	7.992	12.210
<p><b>MISSION AND DESCRIPTION:</b> This program provides necessary equipment to enable the Naval Special Warfare Command to meet specific requirements for the execution of Special Operations and fleet support mission as the Naval Component of the U.S. Special Operations Command. These elite forces are called upon to perform difficult life threatening missions that require modern and safe equipment. Numerous items of equipment, such as small craft, open and closed circuit scuba equipment, and mine countermeasure equipment, are required for the Naval Special Warfare component to execute their unique, special operations missions.</p> <p>1. Combatant Craft and Craft Subsystems. The Naval Special Warfare (NSW) Rigid Inflatable Boat (RIB) program provides a medium range surface mobility platform for SOF insertion and extraction and replaces the Special Warfare Craft (Light), or SEAFox, which has ended its service life. The program supports the procurement of RIBs, trailers, deployment packages, on-board spares, and provides engineering support. Funds for this effort were moved to a new P-1 line for FY 1998 and out.</p> <p>2. Undersea Subsystems. The program funds emergent Dry Deck Shelter (DDS) field changes and the Non-Gasoline Burning Outboard Engine (NBOE) which improves safety of transport aboard Naval vessels.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Replace aging/deteriorating DDS components no longer supportable with new commercially available components. Modify supporting structure to enable installation. Update configuration control documentation and tech manuals to reflect changes.</p>								



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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE SOF MARITIME EQUIPMENT	FEBRUARY 1997
<p>FY 1999 PROGRAM JUSTIFICATION: Replace aging/deteriorating DDS components no longer supportable with new commercially available components. Modify supporting structure to enable installation. Update configuration control documentation and tech manuals to reflect changes. Funds initial procurement of 222 NBOEs and 11 engine maintenance kits. The NBOE will increase safety by eliminating the need to store gasoline on board operational vessels.</p>		

P-1 SHOPPING LIST, ITEM: NO. 66

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) - Other Procurement	A. Appropriation/Budget Activity Title/No. Procurement, Defensewide/Proc. Just./2		B. Line Item Nomenclature SOF MARITIME EQUIPMENT										C. DATE: FEBRUARY 1997	
			FY 1996					FY 1997					FY 1998	
			Ident. Code	Unit Cost	QTY	Total Cost		Unit Cost	QTY	Total Cost		Unit Cost	QTY	Total Cost
Weapon System Cost Elements (\$ thousands)														
1. COMBATANT CRAFT SUBSYSTEMS														
A. 24 Ft. RIBs														
(1) Boats		A		76,000	10	760								
(2) Trailers		A		5,000	10	50								
(3) Deployment Packages		A		60,000	5	300								
(4) Shelters		A		2,000	10	20								
(5) Initial/On-Board Spares		A				56								
(6) Comm Equipment		A				317								
(7) Other		N/A				297								
B. NSW RIB														
(1) Boats		A						555,000	4	2,220				
(2) Trailers		A						32,500	4	130				
(3) Movers		A						75,500	2	151				
(4) Deployment Packages		A						310,000	2	620				
(5) Shelters		A						14,500	4	58				
(6) Initial/On-Board Spares		A						19,750	4	79				
(7) Electronics		A						31,000	4	124				
(8) Other		A								56				
C. ALT/MAT/INSTALL		A				56				506				
Subtotal						1,856				3,944			0	0
2. UNDERSER SUBSYSTEMS														
A. Dry Deck Shelter Field Changes		N/A				570				579				611
B. Non-gasoline Burning Outboard Engine														
1. Engines		A											222	1,998
2. Engine Maintenance Kit		A											11	88
3. Other		N/A												168
Subtotal						570				579				2,865
LINE ITEM TOTAL						2,426				4,523				2,865

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BUDGET PROCUREMENT HISTORY AND PLANNING										A. DATE: FEBRUARY 1997	
B. APPROPRIATION/BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE/2			C. P-1 ITEM NOMENCLATURE SOF MARITIME EQUIPMENT								
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACT AND LOCATION	AWARD DATE	DATE OF FIRST DELIVE RY	SPECS AVAIL NOW?	DATE REVIS AVAIL	
1. COMBATANT CRAFT SUBSYSTEMS											
A. 24 Ft. RIBs											
(1) Boats FY 96	10	76,000	NAVSPECWARCOM		C/FP OPTION	Zodiak Boats Annapolis,MD	JUL 96	OCT 96	YES		
(2) Trailers FY 96	10	5,000	NAVSPECWARCOM		C/FP OPTION	Zodiak Boats Annapolis,MD	JUL 96	OCT 96	YES		
(4) Deployment Kits FY 96	5	60,000	NAVSPECWARCOM		OPTION	VARIOUS	JUL 96	OCT 96	YES		
(5) Global Positioning Systems FY 96	10	2,000	NAVSPECWARCOM		OPTION	VARIOUS	JUL 96	OCT 96	YES		
B. NSW RIB											
(1) Boats FY 97	4	555,000	USSOCOM	OCT 95	C/FP OPTION	UNKNOWN	APR 97	SEP 97	NO		
(2) Trailers FY 97	4	32,500	USSOCOM	OCT 95	C/FP OPTION	UNKNOWN	APR 97	SEP 97	NO		
(3) Movers FY 97	2	75,500	USSOCOM	OCT 95	MIPR	UNKNOWN	MAY 97	AUG 97	NO		
(4) Deployment Packages FY 97	2	310,000	USSOCOM	OCT 95	C/FP	UNKNOWN	APR 97	SEP 97	NO		

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION/BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE/2			C. P-1 ITEM NOMENCLATURE SOF MARITIME EQUIPMENT							
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACT AND LOCATION	AWARD DATE	DATE OF FIRST DELIVE RY	SPECS AVAIL NOW?	DATE REVIS AVAIL
(5) Shelters FY 97	4	14.500	USSOCOM	OCT 95	MIPR	UNKNOWN	MAY 97	AUG 97	NO	
(6) Initial/On-Board Spares FY 97	4	19.750	USSOCOM	OCT 95	MIPR	UNKNOWN	MAY 97	AUG 97	NO	
(7) Electronics FY 97	4	31.000	USSOCOM	OCT 95	MIPR	UNKNOWN	MAY 97	AUG 97	NO	
2. UNDERSEA SUBSYSTEMS										
A. Non-Gasoline Burning O/Engine (1) Engine FY 99	222	9.00	Coastal Systems Station		FFP	UNKNOWN	DEC 98	AUG 99	NO	
(2) Engine Maint Kits FY 99	11	8.00	Coastal Systems Station		FFP	UNKNOWN	DEC 98	AUG 99	NO	
REMARKS;										



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BUDGET ITEM JUSTIFICATION SHEET		DATE						
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997						
P-1 ITEM NOMENCLATURE ANTI-TERRORISM/COUNTER-TERRORISM								
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (In Millions \$)		.899						

MISSION AND DESCRIPTION: Program supports Naval Special Warfare Command anti-terrorism initiatives. Initiatives include force protection defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military forces.



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BUDGET ITEM JUSTIFICATION SHEET										DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE MISCELLANEOUS EQUIPMENT									
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY											
COST (In Millions \$)	5.018	12.930	5.646	8.975	9.416	14.116	5.760	5.982			
<p><b>MISSION AND DESCRIPTION:</b> The Miscellaneous Equipment budget line provides for various types of equipment required to support Special Operations Forces (SOF). The line consists of relatively low cost procurement (total item cost normally less than \$10 million) that do not reasonably fit in other USSOCOM procurement line item categories. Examples are joint operational stocks, active noise reduction, civil engineering support equipment and NSW sustainment equipment.</p> <p>1. Joint Operational Stocks (JOS). The JOS are centrally managed, maintained and stored repositories of immediately available Special Operations-peculiar low density supplies and equipment. JOS are designed to provide an enhanced operational mission capability to deployed SOF units in support of world-wide contingency operations and other direct missions. The equipment is located at the SOF Support Activity located at Lexington-Bluegrass Army Depot.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Funds procure critical supply requirements by maintaining off-the-shelf leading edge mission capable equipment on an on-call basis.</p> <p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Funds continue to support critical supply requirements by maintaining off-the-shelf leading edge mission capable equipment on an on-call basis.</p>											



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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE MISCELLANEOUS EQUIPMENT	FEBRUARY 1997
<p>2. Active Noise Reduction. Active Noise Reduction will be built into the headsets and helmets used by aircraft crew members and use electronic noise canceling to reduce the noise level. The system detects the ambient noise signal, reverses the phase and amplitude, and reinserts the signal into the earcup to cancel high amplitude noise levels in aircraft cockpits and cargo bays. ANR reduces the impact of temporary and permanent hearing loss.</p> <p>3. Navy Civil Engineering Support Equipment (CESE). Funding procures authorized vehicles and materiel handling equipment in support of Naval Special Warfare (NSW) requirements.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Funds procure vehicles and materiel handling equipment in accordance with authorized inventory objectives.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Funds continue to procure vehicles and materiel handling equipment in accordance with authorized inventory objectives.</p> <p>4. NSW Sustainment Equipment. Procures investment sustainment items for NSW headquarters and subordinate commands. Items included within this line are deployable rapid assembly shelters, upgrade of local automated data processing systems, and intrusion detection systems.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Funds procure investment sustainment items for the Navy Component Headquarters and subordinate units.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Continue to support investment sustainment items.</p>		

P-1 SHOPPING LIST, ITEM NO. 69

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BUDGET ITEM JUSTIFICATION SHEET		DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE MISCELLANEOUS EQUIPMENT		
<p>5. Individual Body Armor. Funding will procure a similar system of body armor for special forces. This body armor will be worn for individual protection against small arms munitions and high velocity fragmentation.</p>			

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE MISCELLANEOUS EQUIPMENT			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
2. Active Noise Reduction										
A. Hardware										
FY 96	156	1.788	HSC/YAS		SS/FP	BOSE Frammingham, MA	APR 96	JAN 97	YES	
FY 97	2,160	2.100	HSC/YAS		OPTION	BOSE, Frammingham, MA	JUN 97	AUG 97	YES	



BUDGET ITEM JUSTIFICATION SHEET							DATE	
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE SOF PLANNING AND REHEARSAL SYSTEM						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (in Millions \$)	1.086	1.876	.568	1.128	2.516	2.680	2.077	.998
<p><b>MISSION AND DESCRIPTION:</b> Special Operations Forces Planning and Rehearsal System (SOFPARS) is an integrated family of mission planning systems, supported by intelligence databases and imagery that will be used by planners within the Special Operations Forces (SOF) command structure world-wide to plan and preview SOF missions. Major areas requiring automated support include data access and management, information fusion, image exploitation, mission planning and mission preview. SOFPARS develops and procures aviation mission planners and consist of unit/force level systems (transportable) capable of utilizing data transfer modules for avionics initialization and element systems (portable). SOFPARS focuses on the joint requirements to ensure interoperability and standardization of the SOF mission planning process.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Contributes to Engineering Change Order to the Air Force Mission Support System. Contract to provide SOFPARS life cycle replacement mission planning systems.</p> <p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Procures five portable and twenty-three flight planning systems. Begin life cycle replacement of mission planning systems procured in FY 91 and FY 92).</p>								

**MISSION AND DESCRIPTION:** Special Operations Forces Planning and Rehearsal System (SOFPARS) is an integrated family of mission planning systems, supported by intelligence databases and imagery that will be used by planners within the Special Operations Forces (SOF) command structure world-wide to plan and preview SOF missions. Major areas requiring automated support include data access and management, information fusion, image exploitation, mission planning and mission preview. SOFPARS develops and procures aviation mission planners and consist of unit/force level systems (transportable) capable of utilizing data transfer modules for avionics initialization and element systems (portable). SOFPARS focuses on the joint requirements to ensure interoperability and standardization of the SOF mission planning process.

**FY 1998 PROGRAM JUSTIFICATION:** Contributes to Engineering Change Order to the Air Force Mission Support System. Contract to provide SOFPARS life cycle replacement mission planning systems.

**FY 1999 PROGRAM JUSTIFICATION:** Procures five portable and twenty-three flight planning systems. Begin life cycle replacement of mission planning systems procured in FY 91 and FY 92).



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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE SOF PLANNING AND REHEARSAL SYSTEM (SOPARS)			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
A. Desktop Deployable Systems FY 97	9	100.000	ESC/YV		OPTION	LOCKHEED Nashua, NH	MAR 97	SEP 97	YES	YES
B. Portable Systems FY 99	5	38.000	SOFPM MPS, Ft. Eustis, VA	NOV 98	FFP	TBD	APR 99	JUN 99	NO	
J. PC Flight Planning Systems FY 99	23	16.391	SOFPM MPS, Ft. Eustis, VA	NOV 98	FFP	TBD	APR 99	JUN 99	NO	
D. REMARKS:										

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BUDGET ITEM JUSTIFICATION SHEET										DATE	FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2			P-1 ITEM NOMENCLATURE OPERATIONAL FORCE ENHANCEMENTS								
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY											
COST (In Millions \$)	77.878	75.221	108.339	72.473	114.225	67.509	60.200	61.419Y			
<p><b>MISSION AND DESCRIPTION:</b> Provides funding for Classified SOF projects as directed by the Secretary of Defense and/or the Joint Staff.</p> <p><b>FY 1998 PROGRAM JUSTIFICATION:</b> Specific justification is provided under separate cover.</p> <p><b>FY 1999 PROGRAM JUSTIFICATION:</b> Specific justification is provided under separate cover.</p>											



BUDGET ITEM JUSTIFICATION SHEET		DATE								FEBRUARY 1997		
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		P-1 ITEM NOMENCLATURE PSYOP EQUIPMENT										
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03			
QUANTITY												
COST (In Millions \$)	16.914	8.218	10.280	4.916	16.292	11.659	3.957	6.925				

**MISSION AND DESCRIPTION:** This program provides for the acquisition of Psychological Operations (PSYOP) equipment. The purpose of PSYOP is to induce or reinforce foreign or hostile attitudes and behavior favorable to U.S. national objectives. New and emerging national, regional, and ethnic power groupings and religious fanaticism have increased threats of terrorism, insurgency, instability, and subversion. Successful PSYOP can lower the morale and reduce the efficiency of enemy forces and create dissidence and disaffection within their ranks.

#### OPERATIONAL ELEMENT (TEAM)

1. Family of Loudspeakers (FOL). The FOL will consist of modular amplifiers and speakers that can be interconnected to form sets of loudspeakers that will provide high quality recorded audio, live dissemination, and acoustic deception capability. FOL will be transported, operated, and mounted in ground vehicles, watercraft, rotary wing aircraft, and dismounted for ground operations (tripod/manpack). FOL will replace current AN/UIH-6 (250 watt) Public Address System; AN/UIH-6A (450 watt); AEM-1492D (900 watt); and LSS-40 (AN/PIH-1) portable loudspeakers. FOL will permit the conduct of loudspeaker missions over larger areas than present equipment capability and will provide a greater stand-off distance for U. S. Forces/assets.

**FY 1998 PROGRAM JUSTIFICATION:** Procures 141 manpack and 150 vehicle/watercraft loud speaker systems, 38 stands, 150 speaker covers, 38 low frequency modules, and 291 wireless microphones.

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BUDGET ITEM JUSTIFICATION SHEET		DATE
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2		FEBRUARY 1997
P-1 ITEM NOMENCLATURE PSYOP EQUIPMENT		
<p>FY 1999 PROGRAM JUSTIFICATION: Procures 188 manpack.</p> <p>2. Leaflet Delivery System (LDS). This program develops a family of leaflet delivery systems to provide Psychological Operations (PSYOP) forces the capability to disseminate large quantities of leaflets over a wide geographic range to include denied areas. This system supports PSYOP operational requirements for numerous mission scenarios. LDS consists of multiple configurations to meet delivery requirements for various leaflet missions and environments. Current configurations include Guided Precision Aerial Delivery System-Light (GPADS-L); Staged Leaflet Delivery System (SLDS); and Precision Guidance Canister Bomb (PGCB).</p> <p>1998 PROGRAM JUSTIFICATION: Procures 50 LDS/Staged Leaflet Delivery System (SLDS) variants.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures 50 LDS/SLDS variants.</p> <p>ABOVE OPERATIONAL ELEMENT (DEPLOYED)</p> <p>3. Special Operations Media System B (SOMS B). A rapid deployable, C-130 drive on/drive off tactical radio/TV transmission, reception and electronic news gathering system. This system replaces 1950 - 1960s technology and enhances the capability to conduct tactical level PSYOP dissemination in support of regional unified commanders. Reduces airlift requirement from seven C-130 aircraft to two C-130 aircraft.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures one SOMS B television (MTBS) subsystem.</p>		

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BUDGET ITEM JUSTIFICATION SHEET		DATE
		FEBRUARY 1997
APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2	P-1 ITEM NOMENCLATURE PSYOP EQUIPMENT	
<p>4. Deployable Print Production Center (DPPC). A rapid deployable, state-of-the-art computerized digital system capable of creating, editing and producing printed PSYOP products in forward locations and remote sites. The DPPC will be shelter-mounted on a heavy HMMWV with C-130 roll-on/roll-off capability. The system is comprised of a computerized development workstation with multiple input sources (graphics, color scanner, etc.), desktop publishing, highspeed digital color duplicator, and paper cutter. Reduces airlift from one C-5 aircraft to one C-130 aircraft. With this capability, PSYOP forces will now be able to respond and deploy rapidly to forward locations and remote sites in support of theater CINC OPLANS and CONPLANS, with the ability to produce PSYOP printed product immediately upon arrival.</p> <p>FY 1998 PROGRAM JUSTIFICATION: Procures one DPPC Systems.</p> <p>FY 1999 PROGRAM JUSTIFICATION: Procures three DPPC Systems.</p>		

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BUDGET PROCUREMENT HISTORY AND PLANNING							A. DATE: FEBRUARY 1997			
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2							C. P-1 ITEM NOMENCLATURE PSYOP EQUIPMENT			
LINE ITEM/ FISCAL YEAR	QTY	UNIT COST	LOCATION OF PCO	REP ISSUE DATE	CONTRACT METHOD TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAIL NOW?	DATE REVIS AVAIL
1. Family of Loudspeakers										
A. Hardware (Manpack)										
FY 97	6	19,000	CECOM		OPTION	Electro-Space, Richardson, TX	JUL 97	DEC 97	YES	
FY 98	141	10,057	CECOM		OPTION		OCT 97	APR 98	YES	
FY 99	188	10,053	CECOM		OPTION		OCT 98	APR 99	YES	
B. Hardware (Vehicular/Watercraft)										
FY 97	190	22,490	CECOM		OPTION	Electro-Space, Inc. Richardson, TX	JUL 97	DEC 97	YES	
FY 98	150	23,860	CECOM		OPTION		OCT 97	AUG 98	YES	
C. Hardware (Aircraft)										
FY 97	21	39,714	CECOM		OPTION	Electro-Space, Inc. Richardson, TX	JUL 97	DEC 97	YES	
2. Leaflet Delivery System (LDS)										
A. Hardware										
FY 98	50	4,980	USSOCOM	APR 97	C/FP	UNKNOWN	NOV 97	MAR 98	YES	
FY 99	50	4,980	USSOCOM		OPTION	UNKNOWN	NOV 98	MAR 99	YES	
3. Special Operations Media System-B										
A. Mobile Radio Broadcast System										
FY 96	4	2,351,000	USSOCOM		MIPR	NAWC-AD St. Inigoes, MD	N/A	MAY 98	YES	



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BUDGET PROCUREMENT HISTORY AND PLANNING						A. DATE: FEBRUARY 1997		
B. APPROPRIATION / BUDGET ACTIVITY PROCUREMENT, DEFENSEWIDE / 2						C. P-1 ITEM NOMENCLATURE PSYOP EQUIPMENT		
B. Mobile Television Broadcast System FY 96	3	2,503,000	USSOCOM	MIPR	NAWC-AD St. Inigoes, MD	N/A	MAY 98	YES
FY 98	1	2,492,000	USSOCOM	MIPR	NAWC-AD St. Inigoes, MD	N/A	FEB 98	YES
4. Deployable Print Production Center (DPPC) A. Hardware FY 97	1	548,000	USSOCOM	MIPR	NAWC-AD St. Inigoes, MD	N/A	JAN 98	YES
FY 98	1	511,000	USSOCOM	MIPR	NAWC-AD St. Inigoes, MD	N/A	SEP 98	YES
FY 99	3	548,000	USSOCOM	MIPR	NAWC-AD St. Inigoes, MD	N/A	SEP 99	YES
D. REMARKS:								

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EXHIBIT P-5A Procurement History and Planning

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